Northumbria Research Link

Northumbria Research Link

ACADEMIC SELF-CONCEPT AT POST-16: COMPARING PEER-GUIDED, DYADIC AND AUTONOMOUS LEARNING AS TRANSITIONAL INTERVENTIONS

C. M. BONE

EdD

2016

ACADEMIC SELF-CONCEPT AT POST-16: COMPARING PEER-GUIDED, DYADIC AND AUTONOMOUS LEARNING AS TRANSITIONAL INTERVENTIONS

CELIA BONE

A thesis submitted in partial fulfillment of the requirements of the University of Northumbria at Newcastle for the degree of Professional Doctorate

Research undertaken in the Faculty of Health and Life Sciences

May 2016

Abstract

Transitioning from GCSE to 'A' level, students struggle emotionally and academically to meet the requirements of 'A' level study, drop out and fail (Hall, 2003; DfES, 2011a). The OECD (2003) found that post-16 learners rarely know how to learn on their own whereas effective learners have a positive academic self-concept related to higher attainment (Marsh, 2007). This study followed transitioning students working either collaboratively or alone asking what happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics for the first time and is there any impact on their academic self-concept and attainment?

Rooted in a social constructivist paradigm, a mixed method, 9-month study followed 73 learners in their first 12 weeks of an 'A' level programme. Students chose one of three groups; a group guided by a more knowledgeable peer, dyadic pairs or alone. A concurrent triangulation strategy was employed to quantitatively and qualitatively assess students' transitional experiences.

Qualitative data revealed students valued a collaborative strategy. They felt a significant emotional attachment to their peers, which aided academic confidence and understanding. Dovetailed with quantitative data all three contexts showed increased academic self-concept correlated positively with increase in ALIS expected grades (r= +0.299). Emerging themes were the importance of choice of study group, the need for fun, that collaboration stabilised students' emotional wellbeing, students developed a positive regard for others, an increased positive social identity and improved academic self-concept.

Findings illustrate schools can facilitate students' transition, protect them from isolation, boost their emotional wellbeing, and support their academic confidence, not only increasing their academic attainment but preparing them for life-long learning. This research is not only of value to students but also to teachers, headteachers and governors as well as academics and leaders of further education who lobby for more resilient, competent and buoyant learners.

Table of Contents

List of Tables, Figures and Appendicies

Acknowledgements

With thanks to my supervisors, Mr. Jim Clark and Dr. Helen Roberts for my learning journey.

To Dr. Mick Hill, Director of post-graduate research, for his assistance and emotional support.

To my amazing husband Jonathan, for his many roles; motivator, listener, reader and source of constant encouragement without which I could not have completed this thesis.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others. Any ethical clearance for the research presented in this thesis has been approved. Approval was sought and granted by the University Ethics Committee on 8th July 2012.

I declare that the word count of this thesis is approx. 67,000 words

Name: Celia Bone

Signature

Date: 25th May 2016

Personal introduction to the study

Personal research focus

Through my academic and professional life I have become increasingly interested in the way young people learn. As a teacher of 16 to 19 year olds I have more recently had concerns about students' ability to cope with their transition from GCSE to A level studies, as the expectations for these two types of examination courses are very different. Styles of learning and the levels of support from teachers and peers became central to my thinking and have led me to this study which is entitled: academic self-concept at post-16: comparing the effectiveness of peer-guided, dyadic and autonomous learning as transitional interventions. Before I embark on a review of the literature that underpinned this study and the way I conceptualised and undertook the research, I feel it is important to let the reader have an insight into what shaped me and my thinking leading up to this study.

I would like to begin by setting the scene, describing who I am as a person, and a professional as I suggest this has relevance. In order to introduce the reader to how I see the world and my study I have created a visual representation of this study illustrating the mixing of methodologies, the complexity of the student experience, the philosophy and the structure of this work (found on Page 311)

As a teenager in the 1980's I volunteered at a Leonard Cheshire Home for the disabled, helped at open days at a local mental institution and developed an interest in applied psychology. UCCA (now UCAS) decided that my grades were just good enough, so armed with 'A' level qualifications and very little else I entered the world of psychology as an academic discipline. Of all the science

subjects it was understood by my friends and family to be a mysterious one. Most thought psychologists were those people in white coats staffing a psychiatric institution, or perhaps in a research laboratory with rats.

The branch of psychology that I was interested in as an academic discipline in a world before personal computers focused on lab experiments, two-way mirrors, independent and dependent variables and working out statistics by hand. Journals were those dusty books on the shelves in the library and, if not accessible, were available on microfiche – if you could work out how to use the machine! This form of psychology is a science subject.

By the end of my degree, colleagues and friends dispersed clutching their degree certificates into a variety of fields; criminology, education, advertising, prison reform, sociology, business and industry. I used psychology in international business. I worked in human resources and management roles both in the UK and in Germany and used psychometric testing to place the right person in the right job. I found psychology to be really valuable, not only in assessing data objectively and analytically, but from a social perspective in the selection of individuals for successful teams.

As a professional teacher I could not do without psychology and wonder how other teachers know what to do. Through my academic studies I am aware how students learn, the underpinning principles of behaviourism, attachment theory, self-efficacy, motivation, presenting challenges, cognitive dissonance, group dynamics, arousal and performance, memory and cognitive factors. All of which are evident in a day of teaching. This knowledge and more enables me to plan

and deliver lessons that are memorable, encouraging students to develop a passion for life-long-learning.

However, above all else as a teacher I have realised that knowledge is created together. The philosophy of social constructivism derived from social psychology, and the importance of language and modelling began to be my new mantra. My best lessons are when I take a back seat and facilitate. Observing groups of students learning from each other, having fun as well as motivating each other to learn is one of the wonders of being a teacher. Students are happy in each other's company, an equitable relationship with very few social barriers. The students enjoy the game-like environment unknowingly reinforcing each other's knowledge and learning. It almost seems as if they are socially creating their understanding of the words and are learning without taking a great deal of notice that they are actually learning and reinforcing and consolidating.

Over the years I have witnessed some remarkable successes with 'study buddies'. Paired together based loosely on learning styles and multiple intelligences, personality type and availability of study periods, students have joined together, often unlikely study fellows, and have produced the most remarkable successes together, rather than alone. Their examination successes were far beyond their predicted 'data' and their friendships enabled a sense of belonging at a hugely volatile time for adolescents. Their knowledge and self-concept for psychology was thus socially constructed. Their friendships, they reported, have 'kept me going… I couldn't have done it on my own' and have provided these vulnerable adolescents with the encouragement to succeed in their studies. This led me to investigate the way students could develop their learning skills when they have transitioned from GCSE to 'A' level studies.

My main research question is therefore:

What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?

The subsidiary research questions are:

SRQ_1. Is there a difference in the academic self-concept of adolescents who use collaborative learning strategies and those who use autonomous learning strategies?

SRQ_2. Is there a positive correlation between academic self-concept and academic achievement?

With these questions in mind I am now going to explore working with adolescents as an introduction to the participants that form this study.

The context of adolescent learners

'Never underestimate what you can learn from your peers'

When people ask me what is it like being a teacher in a secondary school having to negotiate teenage behaviour all day, the grimace on their faces shows that they imagine my job to be an arduous and emotional undertaking, whereas secretly I wonder whether I could be any happier - teaching the subject I love to students who are excited to learn.

Not uncommonly a sixteen or seventeen year old, concerned with examination pressure to succeed, parental influence and fear of being 'kicked out of college' will share their worries with me in my role as a teacher. During these conversations I hear a worrying echo, "Miss, I just don't know **how** to study". I ask myself after eleven years of participating in the education system – what on earth have you been doing until now? I can't help myself; I offer study skills advice, strategies and a dose of positive self-worth. We talk about self -control and self-regulated behaviours, try to instil 'I' thinking and behaviours. I suggest that adolescents need teachers who are well organised and know how to establish and manage a supportive environment. From my experiences it seems that students respond best to teachers who provide leadership and who enjoy their function as role models, advisors, and reflective decision makers.

Over the last nine years as a teacher I hear myself saying the same thing to my students '...Never underestimate what you can learn from your peers'. This has become such a motto that it kindled the inspiration to research this area for my doctorate. As they leave my room armed with an inspirational idea for studying, smiling, not crying, with confidence not despondency, I realise *yes*, I am in the right job.

As a teacher and new researcher, the rationale for undertaking this study is to explore some of these questions that I encounter as a teacher on a daily basis;

- Is working with others better than alone?
- Can working in groups actually improve your grades?
- Will you feel more confident about your studies if you work in groups?
- Could guided group work help students' transition into good study habits?

I wondered whether there is a difference between working alone, working in a pair or working in a group who has a more knowledgeable member and whether this might affect the introduction to an 'A' level course making it less daunting?

As a psychologist and also as a teacher I have tried to capture features from psychology and social constructivism. As a teacher I am an experimental psychologist trapped within a social constructivist world. I often experience the tension of wishing to isolate variables. However it is clear to me that learning is not easily 'operationalised' as experimental psychologists would like, understanding that students' education is constantly shaped by others and hence is impossible to itemise and unitise.

A mixed methods approach reflected in my professional background was the most appropriate choice. The combination of experimental psychology as an academic discipline with the meaning and interpretation of social constructivism is a reflection of what I have become as a professional teacher as well as a researcher. This study was not an educational experiment performed by an academic, this was an insight into my students' worlds. In my roles as professional and researcher, it was vital to me to use mixed methods methodologies in order to really capture the lived experiences of the students. The teacher in me was eager to tease out potential advantages for *them*, and for *their* futures as learners. Thus the study was not and could not be purely objective, the mixing of methods generated authenticity. I invite the reader to refer to the enlarged visual representation of the study in the Appendix as Figure 51. This individual illustration draws attention to the learners, my interest in the research focus and the structure of this work and may give the reader a schematic perception of my study.

Overview

The remainder of this thesis will be developed in the following manner:

In the first chapter I set the scene for benefits for educational practice and engage the reader with the issues of collaborative learning. In doing this I discuss the research into working together with others and conversely working alone. The literature review frames the research question by critically discussing the two key ideas that underpin this area, learning and the self, pertinent to the investigation of students transitioning into a new world of sixth form study.

Chapter 2 outlines the research methodologies, mixed methods of data collection, aim and paradigm. The emergence of specific tools to fit the purpose of understanding the transitional student experience is explained in full.

Chapter 3 reports the findings of this study, both from a qualitative and quantitative perspective.

Chapter 4 is a discussion of the findings and links the findings to the literature discussed in chapter 1.

Chapter 5 is the final chapter and forms the conclusion to the study.

Chapter 1

Literature Review

Benefitting professional educational practice

The Organisation for Economic Co-operation and Development (OECD, 2003) recognised self-concepts were 'closely tied to students economic success and long-term health and wellbeing' (p. 9) and played a critical part in students' interest in, and satisfaction at, school, which underpinned their academic achievement. Marsh and Craven (2006) found students who approached learning with strong motivation, with a belief in themselves, and with a range of learning strategies were more likely than other students to perform well at school.

Those students who had self-belief, a positive academic self-concept and a feeling of satisfaction whilst learning, found not only school achievement less stressful, (Duckworth *et al.*, 2009) but also their future as a resilient learner was enhanced (Bandura, 1977), perhaps recovering quicker from 'mental scratches' (Nicholson, 2015). It might therefore be beneficial to ascertain details about students' academic self-concept. Self-concept, as Burns (1982) suggested, is considered to be a major outcome of education and contain three ingredients - self-belief, an evaluative component and behavioural tendencies.

Marsh (1990) and Marsh *et al.*, (2006) established that improved academic self-concept led to increased academic achievement. Academics therefore had a vested interest in any effective intervention, with predictive realism, that had the potential to increase a students' academic self-concept, enabling them to be more resilient and academically buoyant (Martin, 2012). This resilience may in turn, impact positively on the student's transition time from being a GCSE learner to an effective 'A' level learner. An effective transitional intervention that 'bridged

several gaps' (Hibbert, 2001, p. 43) from GCSE learning to post -16 could prove invaluable in terms of student achievement and wellbeing.

Anglo-American countries' obsession with material wealth and capitalistic gain may in fact be at the expense of children's wellbeing. The UNICEF Report (2007) revealed that young people in the UK (as a member of the OECD countries) are least happy, even though it seemed that OFSTED reported that schools were responding well to Every Child Matters. However, in a high proportion of schools according to OFSTED (2007a) behaviour in schools was only judged as satisfactory 29% (OFSTED 2007, p. 29). Furthermore and sadly Pring *et al.,* (2009) mentioned that over 75% of teachers reported teaching students who had been 'physically or sexually abused' and where homelessness and 'psychological disorders' were on the increase in 14-19 year olds. Coupled with misuse of drugs such as cannabis and cocaine as well as 'ecstasy, hallucinogens and amphetamines' (Pring *et al.,* 2009, p. 34 and 35) the life of an adolescent learner in the UK was changing (Mumsnet, 2014).

Seeing the United Kingdom and huge countries such as the United States 'ranked dead last and next to last, respectively on the UNICEF 2007 international survey of child well-being' (Hargreaves and Shirley, 2009, p. 52) was extremely concerning for the education community. This was of such grave importance to a student's learning that the UK government issued a series of concise guidelines for all teachers to adhere to, noting the effects on the individual, the family, the community, and of course the school (DfE, 2014).

It seemed that not only a negative sense of wellbeing was apparent, but Crabtree *et al.*, (2006) who provided 'A' level students with a taster day of higher

education study skills, found what they knew was largely determined by previous experiences in secondary schools. Cook and Leckey (1999) reported students to have failed to acquire the life-long learning skills that the educational reforms had hoped for. The changing face of the National Curriculum had resulted in an overriding emphasis on the need to maintain and improve examination performance. Even at the time of writing, as a new specification is being introduced, continued pressure exists on teachers to teach to the question. As a result Crabtree *et al.,* (2006) stated there was an emphasis on teaching the 'right' answer. Their discussion revealed that giving students enough for them to generate the right answer (i.e. coaching students to pass the exam) was prevalent and any development of skills of analysis and evaluation as a result of independent thought tended to be discouraged. 'Students had poor study skills when they entered further education' (i.e. they had been 'taught what to think rather than how to think') (Crabtree *et al.*, 2006, p. 2). There seemed to be very little evidence of personalised learning and learning for life. Although, they argued, in practice few tutors in higher education had any knowledge of teaching and learning approaches used in schools and colleges and the problems their new students faced. In his epilogue Taylor (2012) made a last plea to teachers not to 'spoon-feed', encouraged students to learn collaboratively, and explained strategies that teachers could model in order to best equip students for critical, reflective enquiry for their journey through life… 'And if you think teaching is just about getting your students through those assessment hoops, here is the take-home message: think again!' (Taylor, 2012, p. 167).

Head teachers and leaders of education are placed in a competitive situation by league tables and media attention to examination results. Agencies contributing to this pressure such as the media and student social networks forced managers

and leaders of schools to make considered admissions decisions. Colleges, further education establishments and society have a vested interest in successful students. This has led to an on-going search for the factors that enhance academic performance. A consideration of academic and non-academic factors in the admissions process may have applied benefits, reducing any adverse impact (Crede and Kuncel, 2008) while increasing the accuracy of admissions onto 'A' level courses. Kaufman and Dodge (2009) cited the American College Testing programme for example (where on a two year course they suffered 51% attrition rates and on a four year course only 68% enrolled on the second year) and recommended strategies to involve their students more, develop relatedness, feel more connected to others and their own work. Leaders and managers of UK sixth-form colleges are increasingly concerned with funding per pupil. Additionally they are also beginning to realise mean aggregated GCSE grades are not an adequate indicator for success at 'A' level (Bell, 2000; DfE, 2013; Searle, 2013).

However what data sets, media scandals, league tables and average point scores per student (OFSTED, 2008) failed to illustrate, was the valuable relationships and interactions between learners and learners as well as teachers and learners, embedded in the actual delivery of the post 16 courses. This completely underemphasised the importance and real value of the learning experience which Pring *et al.,* (2009) suggested 'ultimately leads to the educated 19 year old' (p. 59). Political ethos focused on 'atomistic' (p.60) attainment for each student, set and continually increased progression targets, measured attainment outcomes and published above average outcomes, eliminating the nurturing of learning as a worthwhile outcome. Pring *et al.,* (2009) summarised 'good performance is not necessarily educational; an 'output' of high achievers

does not equal an 'output' of educated people' (p. 62). Only by measuring drop-out rates was it possible to argue students were bored with what they saw to be irrelevant to their lives, the retention of new learners was linked to academic as well as social integration (Black and MacKenzie, 2008).

My understanding is that the data failed to embrace the difficult-to-measure concepts that make education at post-16 worthwhile. The data ignored students' wellbeing, happiness and their interconnectedness with peers and teachers. I feel what seemed to be missing from the emphasis on statistics was the richness of relationships in smaller classes. The benefit of 'A' level classes was often the small class sizes where there was time to grow to understand each other as learners and begin to create an adult relationship with the teacher. Many students found this a very positive learning environment. Some students would spend at least five hours with one teacher a week and often more with their peers. This was clearly one of the major benefits of post-16 learning that we are beginning to realise as important. Student friendships as well as teacher-student relations add warmth and a positive emotional climate. Gergen (2001) for example called for a richer understanding of social relationships within the class. Receiving support from those who had already made the transition and had 'lived through' 'AS' just a year ago was valued. This supports findings from 'entry level' (i.e.; into higher education) where students valued personal contact with those who had recently transitioned (Briggs *et al.*, 2012).

As well as sustaining the course, which generated funds for the college, academics were also concerned about students' psychological wellbeing. Marra *et al.*, (2009) suggested that learning together might reduce students' feelings of isolation, forging social contacts and bridging the gap to maturity. They also

suggested students realised they had 'more to gain than to lose', and that students' self-concept evolved into that of more confident and competent learners. An improved self-concept may result in less attrition at a new college, as Yorke and Thomas (2003) suggested the student was less likely to be lonely and alienated, and more likely to persist with his/her studies. Students were also more likely to become reflective learners; Topping and Ehly (2001) found their participants accrued both social and cognitive benefits. Not only students who learn collaboratively but also autonomous learners were also part of the social learning process and may similarly benefit from more structured guidance.

Under new UK legislation students are required to attend education until 18 years old. This meant that councils were required to track students in education at post -16, which created a fear of those students who fall between systems and remain unmonitored (Paton, 2013). Students embarking on 'A' level study for the first time found themselves sharing classes with a wide variety of abilities and motivations towards learning. Some students had a clear pathway of achievement and even their chosen academic destination whilst others were often 'just along for the ride' (participant 31, 2013). Student withdrawal and unsuccessful completion of courses may be associated with a variety of different aspects of teaching and learning. Hall and Marsh (1998) suggested they included negative-group dynamics, inappropriate or inadequate induction, large gaps in student timetables (Martinez and Munday, 1998) as well as the mismatch between learning preferences of students and the theoretical preferences of some of their teachers (Blaire and Woolhouse, 2000). These factors were of great importance to the students' academic success and for their motivation to persist with learning into the workplace and throughout adulthood.

Transition periods

Often catalogued as a 'critical moment' young people's biographies have documented the importance of making the right decision. This is the choice they will make whether to continue at post-16 education. Although for some, adolescence is a relatively stress- free period, for others this choice 'heralds the end of childhood and the beginning of adolescence' (Hirsch and Rapkin, 1987, p.1235). Erikson's suggestion this stage involved the emergence of a sense of identity coupled with Hall's (1904) notion that adolescence is a period of 'Storm and Stress' suggested some problems at this developmental stage. Marked increases in anti-social behaviours, declines in self esteem, school engagement and grades (Eccles, 2004; Harter, 1998; Blackwell, Trzesniewski and Dweck, 2007) have been reported. Although influential, the assumptions made by Hall (1904) in his two-volume work on adolescents, have attracted critque 100 years later (Arnett, 2006). Although it is now commonly accepted that identity formation neither begins nor ends during this age range, adolescence 'is the first time…individuals have the cognitive capacity to consciously sort through who they are and what makes them unique' (Gentry and Campbell, 2002, p. 15).

Adolescence and becoming a sixth form student is a critical period for maturation of neurobiological processes too; the pre-frontal cortex (PFC) which underlies higher cognitive and social functions undergoes structural and developmental changes. The development of the PFC shows increased ability in abstract reasoning, attentional shifting, and response inhibition, processing speed and shifts in emotional capacity. Yurgelun-Todd (2007) summarised 'brain regions that underlie attention, reward evaluation, affective discrimination, response inhibition and goal-directed behaviour undergo structural and functional re-

organisation throughout late childhood and early adulthood' (Yurgelun-Todd, 2007, p. 1). Thus the physiological effects of puberty are additional stressors for the sixth former in transition.

Developmental psychologists believe that adolescents are more susceptible than other age groups to the pressures of peer group behaviour specifically alcohol and drug use. Higgins (1988) reported the downward trend of initiation with illegal and highly addictive drugs such as intravenous cocaine and 'crack'. Such misuse, psychologists have argued, are a response to the frustration young people feel when they believe their 'educational and occupational opportunties are fairly constrained' (Gopelrud 1991, p. 40).

The stressors that adolescents face in a educational transitional phase are also well documented by the media 'It's just continuous pressure … It's a very, very stressful time. There's so much emphasis on this series of exams and anything can go wrong on the day' (NCCA, 2013, p.6). It appears the students are concerned with a fear of failure, especially at not achieving their first choice for university. The Irish Education system were so concerned about students' stresses that teaching philosophies and its effect on student motivation has been debated at a national level; 'These objectives include discouraging an overly instrumentalist approach to learning and encouraging and rewarding critical, reflective and independent thinking (NCCA, 2015, p.9). Indeed Låftman, Almquist and Östberg (2013) found that, particularly with Swedish teenage girls, factors such as high performance, external expectations of parents and older siblings and a culture of getting no less than 100% correct tended to drive stress levels up at this particular age group.

Similarly the quality and importance of student- teacher interaction at this age group was a perceived source of stress (Banks and Smyth, 2014). In particular sixth formers as an 'A' level class receive on average 4.5 hours of teaching per week to the extent these researchers entitled their paper; 'Your whole life depends on it'. In this study the importance of friendships and social cohesion for students who met on a regular basis, experiencing the transition into 'A' level study was documented.

It is clear that adolescence is a period of change. The adjustments to biological changes as a result of puberty are made where 'the new set of inner and outer- endogenous and exogenous – conditions which confront the individual' (Blos, 1962, p.11). These stressors biological, psychological and social affect the successful transition of an adolsecent learner.

LEARNING: Introduction to Literature review

In this chapter there are two main sections firstly on learning, and its professional, global and local context and secondly on self. I discuss ideas, theories and explanations around students engaging with others in a learning environment, considering how students construct their knowledge and understanding and reach a higher level of comprehension. The history of self-concept as a psychological construct is explored. The second part of this chapter illuminates the benefits of a positive academic self-concept, not only to a student's academic attainment but as a lifelong learner. These discussions underpin the research question of this study which is: What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' (Advanced) level for the first time and is there any impact on their academic self-concept and attainment?

The research area- professional context; global, national, and local

Before I begin with learning, I would like to set the scene professionally, globally, nationally and locally. The most cited and most relevant assessment for adolescents is the Organisation for Economic Co-operation and Development (OECD)'s publication of Programme for International Student Assessment PISA (2009) which assesses 15-year old literacy and numeracy skills. UK Secretary of State for Education Michael Gove MP was 'disappointed' following publication of league tables. Here UK student achievement was not progressing in line with its competitors, '… we've been retreating. In the last ten years we have plummeted in the rankings: from 4th to 16th for science, 7th to 25th for literacy and 8th to 28th for maths' (Gove, 2011 p.1). His speech to the House of Commons in December 2013 revealed further tension, '…since the 1990's our performance in these league tables has been at best stagnant at worst declining…21st in the world for science, 23rd for reading and 26th for mathematics' (Gove, 2013). Additionally, the number of 16 to 24 year olds 'Not in Employment, Education and Training' (NEET) peaked at 1.27 million in 2011 and was 975,000 in the first quarter of 2014 (Mirza-Davies, 2014). These are major causes for concern in an industrial and developing society attempting to compete within a fast changing 21st Century world (Gove, 2011). Governments are preoccupied by these results and often fail to see that cross cultural teaching and learning results are unlikely to be directly comparable and as such are not actually comparing like with like. The PISA methodology is therefore more likely to favour very instructional teacher-led cultures and perhaps less where more reasoning and questioning of ideas is valued. Despite the methodological critique OECD (2016) report that at every qualification level, low basic skills are more common in young people (i.e.: 16-24 year olds) in England than in any other country 'This means that despite the

rapid expansion of educational opportunities, and a relatively well qualified

cohort of young adults, the basic skills of this cohort have remained weak'

(OECD, 2016, p.10). This is of great concern to educators and teachers in

England.

Back in the 1980's Entwistle (1982) saw the problem emerging as an increasing

number of universities reported their undergraduates were ill-prepared and a

new focus for university support was getting academics to help their students

learn. Now it is recognised that many students are not well prepared for higher

education by the work they do in secondary school. Rather the intensive

preparation for external examinations may induce a form of reproductive

learning, which is contrary to what is required in most areas of higher education.

This most probably stems from the redefining of individual learners to

'customers' or 'consumers' in the Reagan and Thatcher years of conservativism.

Since the 1980's, marketisation of education 'has created a situation which

encourages institutions to pile up qualifications with a highly short term focus'

(DfES, 2011a, p. 22). Under the pressure of league tables, students in

secondary schools tend to be 'spoon-fed' for longer, and are less equipped with

'self-learning skills' (National Audit Office, 2002, p. 15). However some have

argued that this 'second way' as Hargreaves and Shirley (2009) refer to it, is

what happens when parents passively hand over their children to teachers to

achieve a quality product i.e. the best examination results possible. This system

was monitored stringently, examinations became standardised and a level of

uniformity entered the educational system. Also it is 'becoming clear that

students, even very effective students, differ considerably in the ways they prefer

to organize their learning' (Entwistle, 1982, p. 66). I concur with Taylor (2012b)

who devotes a sub paragraph entitled 'spoons and hoops' and suggested that

teachers end up 'delivering content' spoon-feeding 'our students in bite sized chunks and train them to jump through assessment hoops' (Taylor, 2012, p. 7) resulting in teachers delivering a certification-focused educational system.

Entering the 21st Century, a 'Third Way' (Hargreaves and Shirley, 2009, p. 14) revealed even further governmental demands and performance targets. All kinds of performance targets are presented to baffled parents, students 'celebrated' the end of each year with a ceremony similar to a graduation and head teachers are interviewed in newspapers about how their students' grades were a percentage higher than last year! Additionally in 2011 another new school performance measure 'English Baccalaureate' was introduced in which students were encouraged to enter into a faster GCSE race. As a result Seldon, (2010) claimed, 'reluctant students are processed through a system which is closely controlled and monitored by the state' (Seldon, 2010, p.1).

Since the introduction of 'A' levels in the 1950's they have been considered the main entry requirement into further education. However 'A' level studies have evolved continually. During the late 1980's and early 1990's a number of modular courses became available, but it was not until the late 1990's when the proposals for a reform of 'A' level subjects were presented with Curriculum 2000. With this educational reform, the Department for Education and Skills hoped students would take a broad range of 'AS' (Advanced Subsidiary, a one year course) in their year 12 of school or college and then reduce this to three subjects in year 13 (their final year of education).

The philosophy of a 'broad range' in education met with 'modest success' as the Guardian (2012) reported and found that most students had opted for subjects of

a similar specialism and kept the number of 'A' level subjects to three. In lieu of further educational reform, Ofqual (The Office of Qualifications and Examinations Regulation) targets all 'A' level subjects to be linear by the summer of 2019 (i.e.: with no interim 'AS' exam). This has important implications for the teaching of a subject that has to be examined only once at the end of a two year durational academic cycle (for this study; psychology and ethics examinations revert to linear with no interim 'AS' as of September 2015.)

With only three subject lessons to attend (i.e.; 180 guided learning hours for an 'AS' qualification) students were faced with the prospect of a reduced subject timetable and, for the first time, 'free' or 'study' periods. Coming from a rigid set timetable at GCSE with no free time, sometimes only two or three minutes to move around a school to reach their next lesson and often 11 GCSE subject lessons to attend, 'AS' students received time built into their timetable for study or relaxation. Roberts (1981) suggested unless students are taught how to study, they feel confused and ill equipped to benefit from this valuable allocated study time. While Zimmerman (1989, 1990) found those students with taught study skills exhibited a high sense of efficacy, improved knowledge, skills and commitment. Similarly, Hodkinson and Bloomer (2000), found many positive reports of sixth-form study ethos. In some of the schools and colleges where I have worked, a 'sixth-form transition week' was tried. Here, as in a university 'fresher's week', study skills, referencing, library work and note-taking skills were introduced. However, in my experience, students failed to grasp the importance or relevance of these activities until they were 'in the thick of it', so such transition interventions met with limited success.

Gorman (1998) however, warned teachers need to think clearly about learning stages and outcomes before encouraging students to spend their study periods independently or with peers. I considered what Gorman (1998) argued, but felt that if teachers of sixth-form are not actively encouraged by their academic peers to take the occasional risk and try some innovative group thinking then the learning as well as the teaching stagnates.

Life-long learning as a major component of UK economic competitiveness was highlighted by Dearing (1996) and more recently DfES (2011) who stated the need for post 16 and undergraduate curricula to effectively address the development of student skills suited to a world in which their education should make a critical difference to their future lives. Mayer *et al.,* (2008) argued the key ingredient for successful learning at this level of study was shifting the learning process from the teacher to the student. Goodbourn *et al.,* (2009) defined this as learning to learn, 'a process of discovery about learning. It involves a set of principles and skills which, if understood and used, help learners learn more effectively and so become learners for life. At its heart is the belief that learning is learnable' (Goodbourn *et al.,* 2009, p.3).

Numerous Government initiatives such as, Every Child Matters, DfES, (2003), 16-19 Bursary, DfES (2011), Leadbetter (2004), and Leading Edge, DfES (2004) attempted to incorporate personalised learning into an existing rigid school structure and help adolescents bridge the child-adult barrier. Despite this, criticism of teaching at sixth-form level continued. The National Strategies reported 'transition from KS4 teaching into more independent study and didactic less interactive teaching styles in the sixth-form as challenging to manage. 25%

of schools cited this as being a main contributor to high 'AS' fail rate' (DCfS, 2010, p. 22).

Because students spend so much of their time in educational institutions, not only their academic attainment is important, but also their social and emotional wellbeing. Gray *et al.,* (2011) suggested the factors that contribute to making a school or college 'academically effective are not the same ones that make it a 'supportive' institution' (Gray, 2012, p. 30), arguing that examination results do matter, but a singular focus on these results and very little else points to a very low correlation between schools 'effectiveness' in academic achievement and social and emotional wellbeing. Some educational institutions offer a variety of learning environments, for example the opportunity to carry on a conversation after a lesson or to study alone in silence. Although sounding like a wonderful idea that following a lesson a time could be set aside for consolidation, peer discussion if necessary and the making of additional notes, in most colleges and schools this is logistically impossible. Instead a busy college structure assigns this time to students as either 'free' or 'study' periods based on a set timetable generated from the constraints of available resources.

Sharp *et al.,* (2002) suggested if some adolescents found their peers to be influential and motivational in the acquisition of knowledge and skills, then surely they should be allowed to learn together in a social environment conducive to study? Despite these continual governmental interventions Boud *et al.*, (2001) claimed, adolescents entering higher education lacked the skills to work readily with each other. He suggested that these are not just 'interesting options, but may need to be incorporated as normal parts of the curriculum' (Boud *et al.,* 2001, p. 172).

One consequence for education is the fresh interest in the design of learning environments. The UK's 'Building Schools for the Future' project indicated how renewed school spaces embraced a more social form of learning and the design of learning spaces were of greater importance (Woolner, 2007). Crook (2013) suggested the need for more 'togetherness' (Crook, 2013, p.35) and shared open and casual spaces for study were also identified in university designs. Crook (2013) quoted Bennett (2003) where newly designed and remodelled libraries provided 'break out' and discussion areas, as well as silent study and collaborative spaces. Although Gayton (2003) reported these initiatives were not always positively received by the librarianship community, and certainly not universally accepted.

From my own experience as a student in the 1980's and now in the 21st Century, it does seem the diverse set of library users have welcomed these innovations. The students in my study who chose to work alone often worked in 'the cubicles'. These are segregated sectioned learning pods designed to minimise interaction and are in a silent zone.

Asking students what was important for their study experience Crook (2013) found the most important aspect in motivating them to study was the presence of others studying in a relaxed environment, not the building having organised spaces. Crook explained this was a 'a sense of reassurance from the co-presence of peers with common predicaments and goals' (Crook, 2013, p. 46) that allowed students to feel included in a social identity of being a learner. This notion of students wanting to be *with* others, but not all acting similarly, perhaps reflected the importance of the 'social animal' where the need to congregate in a

shared environment, having a shared experience 'without intentional communication of that sharing but as something inferred from the relationship of others to corporate identity' (Crook, 2013, p. 47).

The OECD (2003) reported that students rarely learn how to learn on their own, 'during the process of becoming effective and self-regulated learners, students need assistance and feedback, not only on the results of their learning' (p. 73). Bembenutty (2011) agreed and called for aspiring teachers, teachers and school psychologists to discuss and embed self-regulatory learning strategies such as help-seeking, computer-based learning and especially, he argued, a delay of immediate gratification as essential components of successful higher education. He said 'they reveal a gap in our current post-secondary education system in issues surrounding self-regulation' (Bembenutty, 2011, p.122). As a teacher I also agree with this sentiment as it seems students are often merely moulded participants in a race to attain certificates achieved through drip fed teacher-answers. I concur with Taylor (2012) who also believed if the education system spent less time 'teaching to the test' and 'more time teaching students to think for themselves' then students would be better equipped to face the challenges of examinations (Taylor, 2012, p.1). Birch (2012) confirmed too how the problem of a lack of independent study skills was driven by Key Stage 4 teachers delivering a memory style GCSE testing regime where countless opportunities to re-take modules existed for students.

I appreciate both sides of this argument voiced by the academic community. Students were eager to perform well in tests and exams and often tended to measure their perception of how good a teacher was by the number of people who achieved high grades in their class. I suggest the majority of students, like

water, will find the easiest route to the pool, and tend to choose the easy option of being told what they need to learn in order for them to excel at their examination. This is often reflected in what they mean by a 'good teacher', when they really mean a 'good instructor for examination result reliability'. However there are some students, especially at 'A' level, who want to and need to be encouraged how to learn study skills in order that they do not face massive disappointment in the world of higher education and work.

Researchers also reflected on their methods of learning, as they were students. One author, stated, 'When I started university, I was fresh out of sixth-form. Life there was so safe; the courses were delivered in a strict and formal way. Very little independent thought was required. Teachers were there telling me what to do, how to do it and when to do it. I must admit, I liked it that way.' (McIntosh, 2006, p. 612). The problem of what teachers need to teach, the way in which they deliver this information and how a diverse set of students assimilate this information is a challenge for the profession. The teaching profession faces the challenge to encourage students to be independent and self-directed learners. This is a challenge with constantly moving goal posts. In a culture in a constant state of flux from educational directives (Koh *et al.,* 2012), driven by exams, perhaps the aim is not actually achievable.

The gap is also evident for higher education institutions. Entwistle reported this problem back in (1986) and more recently Wolf, the governmental advisor on vocational education, was quoted saying 'a large number of universities are having to do more lower level work with students when they come in to bring them up to a certain level, particularly in maths' (Ross, 2012, p.1).

Employers also notice the lack of skill in job applicants. The UK's official website for graduate careers noted the generic skills employers search for in applications are team work, problem solving and communication skills (Prospects, 2013). The Council for Industry and Higher Education (CIHE) found that 86% of employers considered good communication skills to be important, yet many employers were dissatisfied with graduates' level of skills in these tasks and doubted they were able to 'express themselves effectively' (Archer and Davison, 2008, p. 6). Palinscar and Brown (1984) suggested students should gradually evolve a repertoire of strategies achieved through teachers modelling behaviour.

In the same vein, it is now commonplace for employers to regret the limited capabilities of graduates to cooperate and coordinate with others (CBI, 2009). Crook (2013) agreed, and referred to cooperation and communication with others especially in the workplace as the 'social turn' (Crook, 2013, p. 33). He explained it was not an abstract academic conceptualisation of human nature but 'imperative for human action'. However teachers and students are being manipulated and driven by a constant barrage of government initiatives.

Coffield (2007) suggested phrases such as 'up-skilling' and 're-skilling' workforces were ugly and came from government publications. The implication of such phrases was the student was in the driving seat and the government was permanently in the back seat manipulating the driver to go in a certain direction. 'The image of the ideal practitioner …is of a government agent who is regularly upgraded in order to implement without question the latest government initiative, who 'personalises' the learning of all his or her students, while simultaneously responding to the ever-changing, short-term needs of local employers' (Coffield, 2007, p. 16). I concur with Coffield (2007) teachers are at the mercy of

governmental interventions, critiqued through inspections, league tables and even school closures if and when they do not meet these required standards.

In summary, modern day society requires individuals to study independently and have self-regulation over their study behaviours. It requires them to be confident about working well with others, and have a high level of skill, knowledge and problem solving ability. It appears however that students at post-16 in the UK are unable to study well, the UK higher educational institutions criticise them for being ill prepared (Ross, 2012 quoting DfES, 2011a) and UK industry complains that they are not well prepared for collaboration and problem solving (CBI, 2009). Students' grades have increased over the years (Guardian Editorial, 2012) but perhaps their abilities and independence are not being instilled as skills for life.

Understanding this is an important issue for society and education. This investigation looked at the study skills of post-16 learners who were in a transition period from an instruction, knowledge based classroom (GCSE) to an environment where their independent thought and study skills were highly valued ('A' level). As a curriculum innovation, 'A' level study was intended to encourage breadth of study, with most students taking four or more 'AS'-levels (Hodgson, Spours and Savory, 2003). Now even more relevant with current curriculum reform introduced in September 2015, a renewed focus on breadth of knowledge rather than a modular understanding has been introduced with a new two year 'A' level with no 'AS' examination and teaching focus must shift towards skill rather than content. Literature has indicated how teaching students study skills may increase their academic attainment as well as their academic self-concept, and may also ease the transition between two different educational worlds – GCSE and 'A' level.

Theoretical context for collaboration

In this sub-section on learning I set out the importance of social constructivism as a key component that underpins the learning environment of transitioning students. Constructivism is a point of view where people actively create new knowledge as they interact with their environments (Wheatley, 1991). However social constructivist theory extends constructivism into social settings (Burr, 2003). Social constructivism is based on the premise that social learning precedes development and social interaction plays a fundamental role in the process of cognitive development. A child's cultural development appears on a social (inter-psychological) and then internal (intra-psychological) level.

Social constructivism as an approach to the social sciences drew from a number of academic disciplines including sociology, philosophy, linguistics and social psychology. Although Burr (2003) proposed the 'term used almost exclusively by psychologists' (Burr, 2003, p. 2) it has become integral to educationalists. Discursive psychology, for example, focused on social interactions and language, 'how people use language in their everyday interactions, their 'discourse' with each other' (Burr, 2003, p.17). They argue that the world which we experienced and the people 'we find ourselves to be are first and foremost the product of social processes' (Cromby and Nightingale 1999, p. 4). Most agreed that these social processes, primarily language, were central to everyday life experiences (Andrews, 2012).

This theoretical framework suggested knowledge could not be passively transmitted from a teacher to a student, and that learning and understanding was an active process of asking, confirming through questioning, enquiry, and

subjective experiences. In this way individuals or groups of individuals define their reality. This study was important to my understanding of how students' knowledge was strengthened or weakened by working with others.

As schools are multi-cultural social settings, learners participate in a broad range of joint activities, they internalise the effects of working together, and continually acquire new strategies, schemas and knowledge of their worlds (Stavaredes, 2011). This environment is critical to teaching and learning, therefore learning cannot be viewed in isolation from cultural and social contexts (Daniels, 2011).

Social constructivism emerged from Vygotsky's social-cultural theory (1962) whereby the interactions and mental functioning between individuals are key. Thus it offers a powerful theoretical framework providing support for the premise that learning collaboratively could unlock the post-16 barrier to effective life long learning.

As a psychologist, and from a largely empiricist rhetoric, Vygotsky (1978) identified mental processes which underpin social interactions such as 'abstraction', 'generalization', 'comparison', 'differentiation' 'volition', 'consciousness', 'maturation', 'association', 'attention', 'representation', 'judgement' etc. Naming these psychological processes was the end result of thorough investigations into social interactions. His suggestion that learning is achieved in cooperation with others has been instrumental in the design of educational practices. Vygotsky saw social interaction as a fundamental role in the development of cognition:

'Every function in the child's development appears twice: first on the social level, and later, on the individual level; first, between people (inter-psychological) and then inside the child (intra-psychological). All the higher functions originate as actual relationships between individuals' (Vygotsky, 1978, p. 57).

Vygotsky (1978) explained further that learning is a shared process in a responsive social context. Explaining how a six month old child 'gets to know' a spoon and what a spoon is used for, for example, by reaching out with its hand, interacting with the mother who brings the spoon closer. This communication is only possible in cooperation with others. Although many post-16 students have learnt the basics of eating, drinking and communicating, the example serves to illustrate how schools are social spaces and how students learn in cooperation with others, not in isolation. One of the first impressions outsiders have when visiting a school is the buzz and energy provided by the mass of students and their enthusiasm (DfE, 2013). For example teachers often ask to come for a 'look around' a school prior to making an application to work there to 'get a feel for the place'.

In terms of learning Vygotsky explained his concept of the 'zone of proximal development' (ZPD) as the difference between what a child can accomplish independently and what can be achieved in conjunction with a more 'expert' partner. The 'expert' is viewed as having responsibility for adjusting the level of support or guidance required (scaffolding) to fit the 'novice's' zone of proximal development or ZPD. The ZPD is explained as the distance between the actual and the potential development level under adult guidance. Students in a dyad context may work together, perhaps because they knew more than the other or perhaps because they felt they could work happily together. Students may even

take turns in becoming the 'expert', and perhaps, realise they can help their partner to progress, as both are aware of the difference in knowledge and understanding between them.

Current educational thinking as well as studies grounded in a Vygotskian framework has supported the view that cognitive development depended on active social interaction, including reasoning and explanation, with a more competent partner who had a different subjective understanding of the task. Evidence from studies from a wide diversity of ages, tasks and social contexts irrespective of feedback, showed that students with higher level reasoning benefitted from collaboration; for example Garton and Pratt, (2001); Samaha and De Lisi, (2000) and Tudge, Winterhoff and Hogan (1996).

Children, Vygotsky argued, gained the most when aided by a 'More Knowledgeable Other' (MKO). This model explained how students could go beyond the information they were given and span the ZPD, with the assistance of others, in order to reach the penny dropping moments. This is illustrated clearly in a pictorial representation Figure 1 where an MKO explained information at a horizontal level to another student and the 'ah, ok now, I get it' revealed the benefit of the ZPD.

ZPD and the role of the MKO
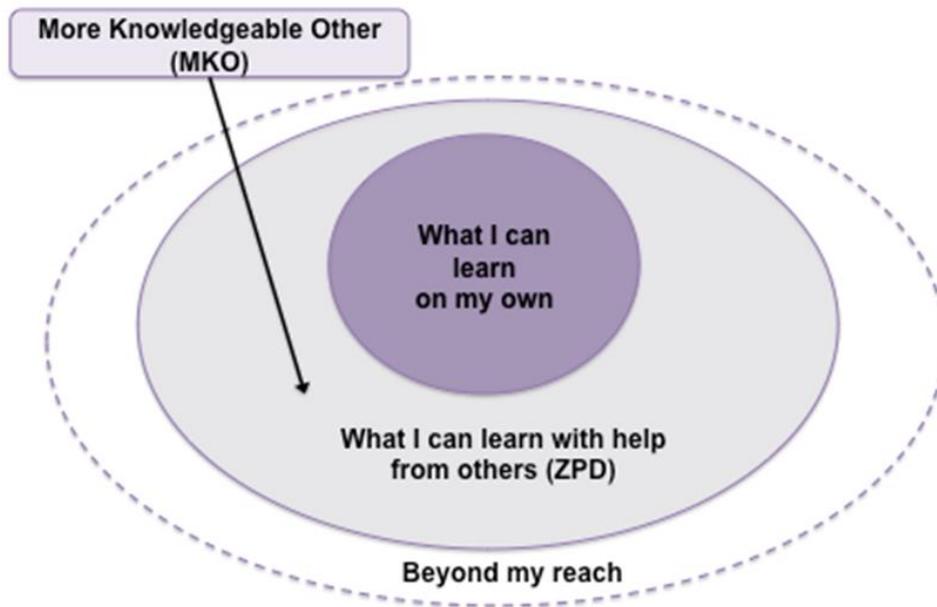
Figure 1 The zone of proximal development.

Vygotsky (1962) proposed learning to be an active process involving engagement and building on new ideas based on current and past knowledge. He focused on the connections between people, and the socio-cultural context in which they acted and interacted in shared experiences (Crawford, 1996). Researchers within the Vygotskian socio- cultural perspective tradition such as Rogoff (2001) also placed the emphasis on learning as social interaction and exchanges which shape the experiences of each other as learners. Rogoff (2001) stressed the social and emotional aspects of learning when she explained that cognitive development and learning is most likely to occur when two participants, differing in ability (i.e.: a new year 12 student with an experienced year 13 student) work collaboratively on a task to arrive at a shared understanding and competence. This potential level of development is possible with a capable peer or an adult (Johnson and Johnson, 1994).

Allowing others to assist in the acquisition of knowledge is a useful and pragmatic tool in the education system and is under-utilised in schools, sixth-form colleges and educational environments. Perhaps teachers feel unable to allow others rather than themselves to be the 'giver' of information. Rogoff's (1998) concept of 'guided participation' also provided useful explanations, helping to expand how Vygotsky's views on learning could be put into practice. Guided participation involved students building bridges to access new understanding. Sharp *et al.,* (2002) quoted students mixing with students from other year groups effectively enabling the social interaction to be much wider than in regular lessons; 'You're not on your own when you're working in a team' (Sharp *et al.,* 2002 p. 34).

The need to feel emotionally supported in order to do well is an important developmental characteristic particularly of adolescent learning. Teachers recognise that, as professionals they are charged with developing emotional support and a positive classroom climate as essential elements of a successful educational environment. In this way Holzman (2009) suggested getting the emotional climate right for learning is just as important as the curriculum, and referred to this as the 'zone of emotional development'. Getting the emotional climate right is crucial as disengagement could be traced back to schooling at a very young age (Hall, 2003) where students were 'put off' school and 'put off' learning.

OFSTED (2007) in their National strategy pilot reported the importance of social and emotional aspects of learning. With a focus on social, emotional and behavioural skills, their findings showed students could work better together in a team, were better able to articulate their feelings and showed a greater degree of

respect for each other's strengths and differences. Perhaps this does not go far enough. Teachers were already familiar with engaging students socially and emotionally, and I suggest that simply inspecting to ensure this happens rather undermines the art of teaching and pedagogical skill. Teachers understand the need for learning to take place in an emotionally safe world (Slavin, 1990). Piaget (1971) believed that cooperation between peers was likely to encourage real exchange of thought and discussion. Moreover, Vygotsky (1962) argued the range of skills gained through peer collaboration was greater than anything that could be achieved in isolation. Perhaps in order to incorporate this 'social turn' (Crook, 2013) into the actual learning experience schools might be brave enough to consider out of lesson contexts in order to fully embrace the idea and find space within the timetable for this.

Historically learners have worked in pairs or small groups. Socrates (470-399 BC cited in Bragg, 2012) encouraged learners to work in small groups appreciating the role of others in knowledge acquisition and the cultural influences and ways of knowing. Mentoring, as a collaborative methodology has been extensively researched (Topping, 2005). Positive effects were found with a variety of age groups where the average tutee made significantly more progress than the controls (Tymms *et al.,* 2011). Educational research provides support for such 'socratic' learning or mentoring although in reality most of us learn better through the use of a guide, whether it be a -'how to…', television cookery programmes or watching carefully as your friend or boss shows you a particular method of changing an air filter on a car. It is the more knowledgeable other (MKO) in operation.

However, a peer who guides others, and a dyad, involves a more dynamic bi-directional process, which taps into an engaging joint accountability (Topping and Ehly, 1998). Dyads particularly in this study evaluated their experiences as a positive one. Their horizontal rather than hierarchical relationship structure was successful. Eisen (2001) for example suggested the interchange between peer learners fostered a deeper reflection because it introduced contrasting perspectives and generated arguments about interpretation and meaning. Littleton and Mercer (2013) suggested that people who are of a similar age and status who work together have 'symmetrical' rather than the 'asymmetrical' interactions that exist between a student and their teacher. They suggested that although symmetrical relationships and communications had their place in collaborative learning environments often students were unaware of how to actually talk to each other effectively and as a result chaos ensued.

Littleton and Mercer (2013) and their findings resonate with my own teaching experiences. My classes are well schooled and practiced in group work, collaborative tasks as well as cooperative practices. When I am asked to cover another class where the students are not as familiar with collaborative learning methods they often face difficulty sharing their answers with their partner. Boud *et al.,* (1999) agreed and acknowledged that collaborative learning could contribute to the social and psychological needs of learners but other sources did not consider this important and 'tend to treat peer learning mainly as an instructional strategy, rather than an approach which pursues a broader educational agenda' (Boud *et al.*, 2001, p. 414).

Bruner was influenced by the writings of Vygotsky. In terms of knowledge acquisition, he appreciated the relevance of others and their cultural influences

on ways of knowing. Bruner (1971) suggested that much of collaborative education stems from three main areas, through action, through imagery and through a range of symbolic systems. The educational process he explained, involved construction, elaboration and transformation of ideas where negotiation and sometimes conflict was involved. In this way Bruner's ideas made more theoretical sense because they focused on the necessary interconnectedness of learning, culture, environment, perception and schematic experiences. He suggested that education had changed since his initial reflections in the era of instruction in maths and science and the American Sputnik. In his seventh decade as a psychologist, Bruner more recently reminded educationalists to direct their attention to groups of students attempting to work together. Successful students he suggested should tell one another, perhaps through story telling and other narrative forms about what they know about the world. If they told each other what they had learned, and also about the operation of their individual (meta-cognitions) and collective minds (group inter-thinking) they would be 'demonstrating useability of knowledge about a subject' (Crace, 2007, p. 1).

The social functions of peer learning have been extensively documented. Ladyshewsky (2000) showed peers played an important role in creating a positive learning environment. Woolfolk *et al.,* (2001) found intellectually able students deepened their learning by explaining concepts to peers, and lower achieving students benefitted from the additional support offered by peers. Furthermore, Goldsmith *et al.,* (2006) found approaching peers for assistance was often associated with less performance anxiety, as relationships were informal and non-hierarchical. Language learners for example, felt less anxious with peer learning leading to increased levels of confidence when interacting on

a horizontal rather than vertical power relationship (Brown, 2001) which was something that I aimed for in my teaching. Seen from an evolutionary psychological perspective, the need or drive to successfully work together gave us the adaptive advantage.

This evolutionary standpoint is convincing, a huge brain capacity driven by billions of neurons combined with the ability to think collaboratively has enabled us to be hugely powerful. An illustration of this adaptation is seen in any classroom when students were told they had a surprise test. Students might immediately enter a stress response. Spielberger's (1966) notion of 'ego threat' explained the consequences of bad performance led to potential derogatory jugement by others. Students may as a result demand of their teacher that they might work together on the test in order to hide their individual performance deficiencies. This illustrates desires to reduce the impact of a failure in the spotlight, but perhaps more positively that we naturally want to share information for our collective advantage. The Biopsychosocial model explains this further; within-adolescent variables such as study skills and academic self-concept combine with situational or interpersonal variables to determine the levels of anxiety experienced by students (Lowe *et al.*, 2008) suggesting a multi-dimensionality to inter-group thinking.

Perhaps the ability to perform effective thinking in groups could be a genome lag. Littleton and Mercer (2013) proposed a distinctive feature of human cognition was grounded in evolutionary psychology, arguing the ability to solve problems together by combining our thinking had allowed us to successfully develop and adapt to more complex situations. They also argued we are born with 'social brains' (Littleton and Mercer, 2013, p.101) that not only enable us to interact and

manage complex social relationships '… but to inter-think in ways other animals cannot'. With this in mind I posed the same question in the context of my study groups: could group work produce better academic achievement and more creative solutions to problems than individuals working in an autonomous setting? The group might use exploratory talk to co-regulate their mental effort, co-constructing good solutions to problems. The group might then argue productively to construct new robust generalised strategies for completing the task more successfully than they would have done on their own. In this way student groups might in fact work harder and learn more than a traditional lecture and text based component learning (Carlsmith and Cooper, 2002).

Despite the benefits of this group inter-thinking, in their evaluation Littleton and Mercer (2013) stated some of the most pragmatic issues of group work often derail its effectiveness. Examples such as failing to include all members and a lack of deference to the higher status group members led to conflict deflecting from the group task. Further critique of group-think came from illustrations of badly selected management teams where superficial or inconclusive agreements were arrived at and as a result a poor decision was made. A further issue was the common practice of studying in 'friendship pairs' as Jones and Issroff (2005) referred to them, otherwise students expended effort and wasted time getting to know each other thus detracting from trying to solve the educational problem at hand.

Bruner's influence on learning led Howard Gardner to initiate a multitude of funded research projects from Harvard University's Project Zero (Gardner *et al.,* 2003) where the examination of the learning process in children and adults, at play and at work illustrated the power of engaging collaboratively. His emphasis

on multiple intelligences stressed benefits for both formal and informal exchanges. An interdisciplinary curriculum could be managed and designed which could facilitate the interconnections between the intelligences and encourage the cooperation of different intelligences and cultural institutions, perhaps developing more authentic and valid assessments appropriate to a multiple intelligence style for both adults and children (Gardner 1993). Bolam *et al.,* (2005) encouraged the Scottish Consultative Council on the curriculum to do just this, with the aim of curriculum changes to embrace the multiple intelligences and improve the effectiveness of children's learning and good teaching in the classroom.

Students engaging collaboratively is identified in Glasser's (1990) 'Quality school'. Here students made the choice to engage with their friends in a non-coercive and friendly non-adversarial manner. He compared these elements to a business environment where using a 'boss- management' rather than 'lead-management' style failed to motivate staff to want to work, leaving them feeling less engaged.

Gaining student's views via 'pupil voice' questionnaires, allowed evidence to be collected to provide support for the idea that students did seem to prefer to work together. When asked to describe and evaluate their experiences of a recent lesson, pupils (year 8) stated they found the best way to learn was through discussion and listening. In an Educational Action Zone, Whitehead and Clough (2004) reported students preferred to work in a group or a pair that *they* (my italics) had chosen rather than the teacher as it made the student feel significantly safer, 'more able to draw on their own local community knowledge

and because it allowed them to control the content of the lessons more' (Mayer *et al.*, 2008, p. 41). Therefore a key element of this success was choice.

In this study students chose their own partner and chose their own learning context. This element of choice was significant to students. Deci and Ryans' work on motivation indicated that when students were able to choose who they worked with and were able to make this informed decision, their choice meant they were in control which meant they had an increased level of motivation (Deci and Ryan, 2000). This motivation in turn helped students to develop a sense of ownership so they wanted to engage in academic tasks and learning (McCombs, 1986). Connell and Wellborn (1991) agreed that allowing the students meaningful choices developed a sense of ownership over the learning process for example how the students might work together, alone, approach a particular assignment and achieve at their level of competency. They made clear, as did Zimmerman and Schunk (2001), that when students were given these choices about how they might demonstrate a mastery of a concept they took increased responsibility for their success. Glasser wrote in (1988,1990) that it was impossible to force or make students learn but all behaviour or motivation to behave in a certain way was an attempt to satisfy one of our basic needs; survival, love, fun, power and freedom. Thus according to Choice Theory 'students chose not to work in your class because it does not satisfy their needs to do so' (Glasser, 1988, p. 20) and this suggests that students who chose to supplement their class-work with a study period in their chosen style of studying, would be more likely to see the potential success of that session than if they were 'made' to work together.

In his work as an academic support counsellor for undergraduates Lazar (1995) found very few students indicated their use of study groups to learn, invariably concentrating their efforts on solitary study sessions over several hours. It was found that students did not talk regularly to others about academic material, and tended not to associate learning with active communication. Despite research findings, for instance from Bruffee (1993), suggesting collaboration was a necessary ingredient for understanding how to produce academic texts, it seemed this knowledge had not been transferred down to the actual students. Lazar (1995) through interviewing students found their solitary study habits were what was expected of them and their learning habits seemed to be a product of how they were taught to study in classrooms. He quoted a student discussing group study, 'I think English is something that you have to do by yourself. At least that's the way I did it last semester… Your English professor probably wouldn't want you to do that anyway. I think he'd probably want you to have your own viewpoint...' (Lazar, 1995, p. 63). From a well-positioned vantage point of professor as well as counsellor, this perspective allowed this researcher to reflect on departmental and faculty approaches and attitudes to group learning. In this particular scenario the mathematics department were positive about collaboration and actively encouraged their students to form groups, concluding that advice should be given to students about the benefits of collaboration outside the classroom. He argued, and I tend to concur, that college educators who organised collaborative groups in the classroom setting and set cooperative projects, were sending a clear message to their students that this was an effective and acceptable medium to 'demonstrate that intellectual work is inherently social' (Lazar, 1995, p. 65). In this way it is even more important for teachers to scaffold, model group work and illustrate the benefits of collaborative

strategies in order that students are able to generalise this to their own study sessions.

Gender differences in collaborative work have also been illuminating; Swann (1992) showed how the different interactive styles for primary boys and girls can influence the ways knowledge is constructed and thus affect the learning experience. This finding showed that although personality and individual differences accounted for variations, male students tended to dominate discussions and made executive decisions in problem solving tasks. Contrary to Swann (1992) my interview data indicated that females generated considerable confidence when they worked in multi- gender groups;

In a systematic review of 'peer teaching' rather than group learning, Seacomb (2006) found that conflict between students could occur because of differing knowledge levels, educational level or incompatible personalities. It was suggested therefore, and I tend to agree, that there were overwhelming benefits to peer-teaching and collaboration strategies prior to grouping students. (Martin and Edwards, 1998). This is illuminated in the discussion.

For some students working alone or working in pairs would be much better than working in a peer guided group. The key element was their choice.

Learning in groups

No matter what accomplishments you make, somebody helped you. - Althea
Gibson (Tennis player, 1927-2003)

Collaboration involves students working together to complete a single, unified
task that represents the shared meaning and conclusions of the group as a unit.
Peer collaboration is a 'coordinated, synchronous activity that is the result of a
continued attempt to construct and maintain a shared conception of a problem'
(Rochelle and Teasley, 1995, p. 70). I suggest that using peer collaboration the
range of skills that can be developed with an adult or older student as a guide or
as an equal peer exceeds what can be done alone. Peer collaboration is distinct
from peer tutoring, where students work in pairs or small groups providing one
with explicit teaching support, and differs from cooperative learning, which
involves structured learning in groups, where the groups' success is dependent
upon each member of the group contributing interdependently.

In collaboration, from the Latin-based term collaborate, suggesting 'co-labouring',
all participants must actively engage in working together towards the objectives.
If one group member finishes the task and the others 'loaf' then this is not
collaborative learning. For successful collaborative learning, students must all
increase or deepen their knowledge; the 'co-labouring' and sharing of the effort
of learning together becoming evident.

Studies investigating learning at a social psychological level generally indicated
that groups would have a positive effect on individual learning where students
shared and combined knowledge such as seeking feedback. Olivera and Straus

(2004) stated that the group experience actually improved the individual performance on subsequent group tasks.

Knowledge is 'something people construct by talking together and reaching agreement' (Bruffee, 1993, p. 3). An avid supporter of collaborative learning, Bruffee (1993) wanted to avoid students becoming dependent upon their teacher for subject matter, and intended the teacher to be less of an expert and more a peer, as Socrates modelled. Socrates was historically renowned for pioneering this questioning technique to tease out underlying knowledge. However perfecting the skill of posing better questions may be more of a teaching skill than I originally thought. Good teachers give feedback to their students and probe deeper into their understanding with honed questioning. However I had originally anticipated this skill to be reasonably easy for students to master. For example posing questions such as 'What if…? Create a situation where…? What would happen if…?', this skill must be taught as part of the learning process and even with training this skill often eludes some.

Bandura (1977) stated, 'Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action' (Bandura 1977, p. 22). In this way Bandura's sentiment has resonance. The use of successful (and often unsuccessful) group and collaborative work is a social process. Modelling to other students how to behave, how to think, and perhaps what successful and not as effective group work looks and feels like is powerful vicarious learning.

Bartsch, Case and Meerman (2012) illustrated this point with their simple study. Here students watched a peer (vicarious experience) make a presentation about statistics and research methods for which they previously reported a low self-efficacy, and as a result reported a significant increase in self-efficacy.

Despite Bandura's evidence that students learn the ability to learn from others through vicarious reinforcement, it remains that not all children become better at thinking and talking as a result of group work. If, however, society deems group skills and collaborative working to be important and thus an educational priority even more so than literacy and numeracy, then students will need help to develop this skill.

The common threads of Socrates, Vygotsky, Bruner and Bandura underpin many of my teaching practices. The thread is the importance of the social context, the use of language to aid learning, collaborating and modelling good practice, as well as allowing students to learn by watching others who experience success and positive reinforcement. The humanistic philosophies of Carl Rogers have also influenced collaboration. Rogers' ideas emerged from psycho- and client-centered therapy, although a teacher he preferred to see himself more as a 'facilitator', i.e.: an individual who creates the appropriate environment for learning. He focused on the strength of the 'relationship' between teacher and student, illustrated in his classic statement;

> 'Students feel deeply appreciative when they are simply understood – not evaluated, not judged, simply understood from their own point of view, not the teachers' (Rogers, 1967, p. 304-311).

The importance of student led learning i.e.; without the teacher directing every minutiae of the lesson is an innovative and seldom practiced strategy in a performance and target driven environment. The differences between the reception, constructivist and co-constructivist models, where students are encouraged to solve problems together all have their place in different learning contexts. It seems however that a traditional school practice looks for a stereotypical 'normal' student who is capable of certain tasks within a certain time at a certain age: a one size fits all, biscuit- cutter- type philosophy, led using the reception model (Carnell and Lodge, 2002). My study strived for effective learning to take place through an intervention, which actively embraced differences in learners at a critical stage of their development. I embraced the idea that no one is an island and no one knows it all, and therefore incorporated the philosophies of co-constructivism into a practical format.

The benefits of group work and peer collaboration may benefit not only individual group members but also the group as a whole. Hinsz (1990) argued that group performance was likely to improve over that of individuals, due to the nature of 'more minds together', which was more of an intellectual asset than a single student. The benefit of variety; individuals with different interests and perhaps different learning styles was noted by Frank (1986). Here Frank (1986) explained that using a variety of individuals in one group might allow broader and more diverse explanations. Some members of the group might also find different aspects of the task more important or interesting. I suggest this was the case; a 'mixed' group might serve to accentuate certain aspects of a topic, which was a useful meta-cognitive strategy for the group as a whole. Interview data supporting Hinsz (1990) 'more minds together' is found in the discussion.

When students work together on educational tasks they do have to get on with doing the task at the same time as 'get on' with each other. The success on the educational task will therefore depend on 'dynamic interrelations between processes operating on epistemic and socio-relational planes' (Andriessen, Pardijs and Baker, 2013, p. 205). That is how well the group members are able to negotiate their own 'selves', their engagement with the task, previous relationships between participants, desired level of achievement and effort. The main features of 'ideal collaboration' were suggested by Allwood, Traum and Jokinen (2000) who listed four elements; 'cognitive consideration, joint purpose, ethical consideration and trust' (Andriessen *et al.,* 2013, p. 209). This was mirrored in my study where a positive regard for others and the importance of engaging friendships were key findings. The achievement of the groups' educational success pivoted therefore on the cohesion and synergy within the group. If these parameters were strained, the group might not succeed. However one of the benefits of good collaboration was the working relationship grew to be an emotionally stable and tight bond. Andriessen *et al.,* (2013) found in their study of three secondary school boys that they backed each other up 'and seemed to think like one mind, especially when outsiders are approaching' and created a strong social bond they refer to as 'inside group-knowledge' (p. 227).

Mills (1958) looked into the work of Georg Simmel a German micro-sociologist and economist who attempted to develop a geometry of social relations, the effectiveness of small groups specifically dyads and triads.
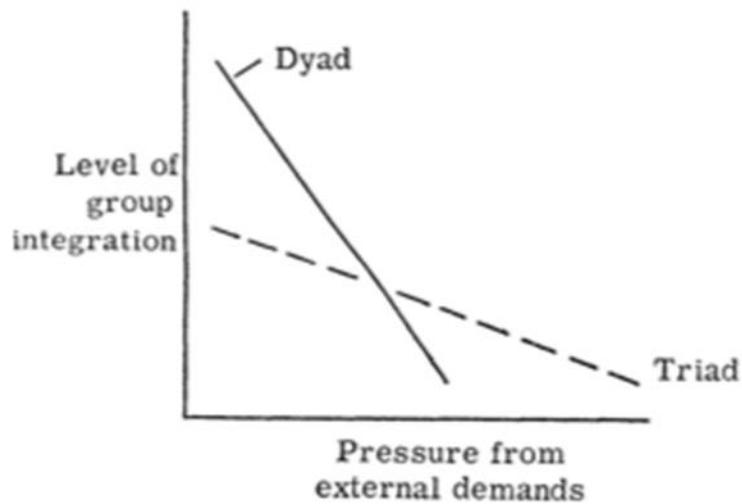
Figure 2 The relationship between dyads and triads according to Simmel cited in Mills (1958).

Debating the benefits and weaknesses of working in pairs or threes, Mills (1958) stated Simmel thought there might be a sense of death in a relationship as a pair but certain permanence exists in a triad. A dyad he supposed may culminate in intimacy whereas a three- person group tended to be either checked or restricted to a subpart. Mills interpreted the translated works of Simmel's suggestions by explaining that over a wide array of tasks and situations the dyad tended to adjust at a lower level of integration than the triad.

Figure 2 illustrates the negative slope of the curve for a dyad is greater than the negative slope of the triad. This indicated that the triads were more susceptible to external distractions, and the dyads, because they had less interaction with others, tended to focus more. Simmel also debated the sorts of pairs that united, separated and came to conflict. In conclusion Simmel suggested that smaller groups were perhaps less robust than larger groups as they 'tend to burn up their

energy' while larger ones 'maintain residual strength' (Mills, 1958 p. 647).

Whether it be a triad or a dyad recent research provided by Nestojko, Bui, Kornell and Bjork (2014) illustrated that knowing in the future you would be required to teach or at least explain a concept to peers led students to better attention and learning skills. They believed that cultivating in learners the expectation of having to teach the material led them to adopt significantly better learning strategies, 'such as organising and weighing the importance of different concepts in the to-be-taught material, focusing on main points, and thinking about how information fits together' (p. 10) On the basis of such findings, it was interesting to see how students raised their attention and learning ability with an expectancy to teach others. The researchers argued this 'might be a vehicle for bringing about learning gains in the classroom' (Nestojko *et al.,* 2014, p.10). For this study being able to teach others, or at least be able to explain concepts to your dyad was of primary importance. Perhaps as these researchers suggested the more often students are primed to teach the material, the better they will be able not only to understand the material themselves, but to assist others in their role as MKO.

The emotional structure of a classroom environment is also a learning issue. Students who were afraid to ask a 'simple' question in class have often sought refuge in smaller less competitive and threatening forums. Using semi-structured interviews Jungert (2008) cited a student who explained; 'If there is anything I don't understand I discuss it with my peers. It is my responsibility to go home and try to grasp what I don't understand because there will always be bad teachers' (Jungert, 2008, p. 209). This research, although from a different context (Swedish postgraduate students), does tend to indicate that on average (in the long run over a three-year course), as in the present study with sixth-form

students, cooperative strategies did seem to facilitate a sense of control.

In a classic study comparing the teacher-oriented approach with active learning Bennett (1976) found that in general students taught by formal methods made the most progress, especially in English, mathematics and reading. The lack of success in active learning strategies here may have been due to the fact that in formal classrooms teachers spent more time on core topics. Furthermore it may also have been due to the sensitivity and questioning skills of teachers knowing when and how to guide students. Evidence from the 'SPRinG' project (Social Pedagogic Research into Group Work) reported by Hargreaves (2009) found no real difference between collaborative, cooperative and seated (on own but helped by others checking answers), although some of the most disaffected and 'struggling loners' made significantly more academic progress than other students.

Because reports from studies have found clear links between cooperative learning and higher educational achievement, thinking skills and friendships, Frender (1990) presented a strong argument to potential students and recommended procedures to help. He suggested forming study groups including noticing who was in your class, contacting other students, generating clear goals for each study session and identifying how the group could get help. This clear strategy the researchers suggested was one of the most productive sources of social support. 'Conference', Francis Bacon argued, quoted in (Dimnet 1927, p.108) 'makes a ready man (or woman)', echoed cleverly by W.H. Auden who famously said 'How do I know what I think until I have heard what I said.'

Learning alone

In comparison to working in a group it could be argued that working alone is 'non-competitive' and is associated with students who are judging themselves on their own perceived mastery of a task. Studies have suggested that students who have a sense of autonomy and control are more likely to have a mastery rather than a performance goal (Kaufman and Dodge 2009). Although different approaches and strategies are used by students on different occasions it seems fairly clear that students are aware of their own 'schema' or how they prefer to learn. These are based in general tendencies or an affinity with particular ways they have previously used to adopt learning (Ramsden, 1992). Despite this tendency, students' schemas of how they learn best are not fixed, and in fact studies have shown that students do adapt and change their study habits as their environmental perceptions change for example as the external demands of a course change, students' study habits may adapt accordingly. Jungert (2008) found that although there were recurrent themes arising in students' learning patterns such as personal responsibility, prioritising and individual focus, across the duration of their course students tended to adapt and change their habits. Although a student may have initially chosen a learning context, they may have changed to an alternative mode over the subsequent 24 months of study.

As students' needs changed a certain degree of flexibility was also required. Campbell (2000) likened this learning to driving down a motorway where one needed to react and respond to how we were placed at any one time in relation to all of the other users of the road. In the present study, however, only one

student changed their learning context suggesting perhaps that they were fairly confident with their choice of group. Although students chose to adopt a study context at school, there may have been students in the present study who found the collaborative study groups useful in a school environment but at home may have enjoyed a solitary style of study in order to complement their need for flexibility in learning. This was not a feature of this study, as this particular study looked at how effectively students used their 'free' or 'study' lessons.

Entwistle (1982) in a review of texts to improve study skills for students in higher education, suggested collaborative learning may have benefits but 'it is in private study that students are more likely to try out their own ideas and explore the implications' (Entwistle, 1982, p. 66). Race (1994) agreed and argued that most learning occurs independently. He argued students learnt best at their own pace, at their own times and in places where they felt in control of their own learning. Michaels and Miethe (1989) agreed too, in their investigation into the relationship between academic effort and college grades they defined good study habits as working in silence such as in the library or another quiet setting with no communication, rewriting lecture notes and designating particular time and place to study. This method was particularly of relevance for 'freshman' rather than more senior students. Referring to students in higher education he suggested when students learn from learning resource materials, whether in libraries, learning resource rooms, or at home, most of their learning is done independently, at their own pace, and in their own way (Race, 2005).

Despite all of the benefits and theory grounding collaborative groups, Wang and Burton (2010) suggested many groups were ineffective and failed to generate any collaborative action (Hardy, *et al.*, 2005; Johnson and Johnson, 1996). Not

all group experiences were positive; despite the common wisdom of 'many hands makes light work,' social loafing may occur (Latané *et al.,* 1979). Social loafing, a term coined by social psychologists, described the tendency by individual group members to reduce their effort as the group size increases. This meant that in larger groups, individual contributions were less noticeable, leading to a tendency for students to sit back 'hide in the crowd' letting the majority work *for* them. Experimentally Latané found that as the group size increased, individuals who were engaged in group tasks did exert less effort. Hence Dembo and Seli (2013) recognised some potential pitfalls of effective group working and suggested a multitude of practical strategies for college students to eliminate and reduce the negative effects of social loafing.

Social psychologists have learnt from group dynamics that informational social influence may in fact result in the whole group learning the wrong thing, referring to the phenomenon whereby if one person (often with perceived knowledge or status) thought something was correct then the rest of the group would also consider the information to be correct – even when it was wrong. This of course would result in the whole group learning the wrong thing just because the others assumed that person to be the wiser.

Despite considerable successes introducing a 'study buddy' pair system for the first time in an Australian University, Hogan (1992) found some part-time students experienced difficulties: 'The study buddy system is difficult for me as I only come into the school once a week and it is difficult for me to get time for my partner and inevitably there have been clashes of personality…I like the buddy system, although it may be difficult if you don't have a good buddy' (Hogan, 1992, p. 14). This illustrated the concept was rather appealing to people but in

67

practical terms students could rarely come to a consensus of place and time and who they might in fact enjoy learning with.

However, teachers must be aware of the pitfalls when they engage students in a collaborative manner. Gilmour *et al.,* (2006) found it time consuming and, as Barron (2000) suggested, some students appeared to be working well but below their individual competency and Mercer (2000) referred to concerns about 'off task' time. Although the experiences of history and everyday life showed great value in collaboration with peers, educational practice tended to shy away from it. Indeed Andriessen, Baker and van der Puil (2011) reported that just because students were friends by no means indicated they would work together successfully in school.

Researchers too have criticised this transient quality of collaborative learning (Thomson, 2006) claiming 'collaboration is like cottage cheese. It occasionally smells bad and separates easily' (Thomas and Perry, 1998, p. 409). When Barron (2003) compared the learning conversations within successful and incoherent groups, she offered ideas that might help teachers and students to learn, practice and use collaborative strategies. Whilst Prior (1995) noted teachers' experiences of group work and expressed caution about group work, noting there were many occasions when it was better for the students to work autonomously.

Furthermore some reticence about collaboration came from teachers (Steward and Page, 2009). They noted the challenges specifically to science and mathematics teachers in the 'SPRinG' project (Social Pedagogic Research into Group Work). Here teachers spoke of the desperate time constraints and packed

curriculum. To begin with they quoted teachers who found it difficult and professionally awkward working alongside other teachers who preferred teaching from the front and found questioning, clarifying, analysing and evaluating difficult. Some mathematics and science teachers offered the view that sitting on separate desks and learning in silence was more successful than learning in groups. Comparing himself to other teachers a mathematics teacher was quoted as saying; …'Now whether that is because, as a teacher, I'm unable to come up with a solution or whether it's because it is a more individualised way of learning' (Steward and Page, 2009, p.114).

Without proper guidance pupils may also become confused about what they are doing. This was illustrated by Bates (1998) who found making learners more responsible and encouraging their independent learning was not without difficulty and warned the disadvantages are time wasting, drinking coffee and vast underachievement. When time wasting and procrastination ate into valuable study time parents, who perhaps had more traditional views of teaching and learning, became concerned. J. K. Rowling (2005) offers snippets of this feeling to teenagers and children in her global best selling Harry Potter novels. To the dismay of their friend Hermione Granger, who seems to epitomise sense and maturity, Harry Potter and his friend Ron Weasley discuss the issue of study time after having been issued their timetables for the first time in sixth year;

> '…A few minutes later, Ron was cleared to do the same subjects as Harry, and the two of them left the table together.
> 'Look,' said Ron delightedly, gazing at his timetable, 'we've got a free period now… and a free period after break… and after lunch…*excellent!*' (Rowling, 2005, p.167).

This reinforced a great swathe of opinions held by students entering sixth-form. Periods without an allocated subject are actually 'periods to study freely' and not allocated free time to waste. Therefore without careful guidance and encouragement some students would actually waste this time. Teachers have a significant expectation of their students to gain these skills reasonably quickly at sixth-form entry but students only gradually realise that they are expected to become more self-directed in their learning (Broad, 2006).

Further to the critique of group-work Moriarty, Douglas, Punch and Hattie (2011) found that although working together improved students' self-efficacy of a task (map reading) they added a note of caution suggesting 'teachers should bear in mind that some students may be more content and more successful working on their own rather than working in groups… students who are not ready to work together co-operatively, therefore, could be permitted to work alone' (Moriarty *et al.,* 2011, p. 84).

International students entering the British further education system have also experienced transitional issues. In a study conducted at a British University with foreign undergraduates, students were asked to engage in an unfamiliar Socratic group work teaching method. This study found that 27% of international students had 'very little experience of group work' at the start of their course (Burns and Martin, 2011, p. 37). Erasmus students similarly experienced the cultural barrier of different teaching and learning methods. It was reported that undergraduates experienced significant issues adapting to the universities' learning methodology due to the low number of taught hours and increased independent learning required for success (Bogain, 2012). This resistance to group learning may be due to the fact these students had learnt how to be successful in conventional

classroom environments. They preferred working on their own so much that they resented 'carrying' the less able and having to share their knowledge and understanding, in pragmatic terms wasting their own learning time.

Lazar (1995) found that many students felt completely out of their depth at university and wasted a great deal of time and talent. Students were emphatically working in isolation, some with success, but not all. 'The students whom I interviewed actually believed that studying alone was not only a reasonable way to structure study time, but necessary to their success in these courses' (Lazar, 1995, p.63). He suggested that these beliefs about the importance of solitary study mirrored a schooling culture that tended to discourage student conversation. Despite the stated popularity of collaborative learning across all ages in the schooling system, Lazar (1995) and Goodlad and Hirst (1989) claimed that students 'rarely get to talk to their peers in class; the noise and nuisance of peer talk relegate it to select and infrequent occasions during the school day' (Lazar, 1995, p. 63).

This ethos and learning culture was echoed in Steward and Page (2009) who suggested not all schools in the SPRinG project were supportive of their group work project. In fact, they quoted, as if surprised, that the traditionally managed schools had the view that the only real way to learn is for 'pupils to write individually in their own books' and where 'an effective classroom is a silent one' (p. 112). Further, due to the nature of work-scrutiny and performance-led management of teachers Steward and Page (2009) cited teachers who were frightened not to have enough evidence of their learning in the student's exercise books. This meant in practical terms that teachers were reluctant to engage in group-work for fear of criticism from their own management teams.

When working with lower ability students or indeed students with special educational needs groups are not always the best solution to learning. Some students find group work a challenge for reasons of personal choice, emotional outbursts, feelings of inadequacy or perhaps they are unable to filter all of the social cues that serve as distractors. The recognition by a teacher of a students' personalities and differential learning abilities will always need to be part of the consideration for working alone. Some students may be confused and distracted by others causing negative consequences that disaffect their learning.

Similarly, when teachers construct groups of diverse personalities care must be taken. A sociological study examining the subcultures within education Mac an Ghaill (2007) and Barnes (2000) found some of the boys actually talked to each other in a type of code or sub-cultural speech, excluding the others in the group. Thus when considering coercing students to work together, some negative consequences may have to be factored in '…avoiding if possible placing two of these students in the same group' (Barnes, 2000, p.166).

Self-regulation

Done well, there seems to be more evidence for the benefits of learning together than alone in terms of academic motivation and satisfaction. Research consistently shows that structured group work builds on 'positive interdependence and individual accountability and also raises student achievement' (Mills and Cottell, 1998, p. 24). Hill and Reddy (2007) found the simple benefits of working with a peer could improve not only the standard of written psychology reports, but issues and misunderstandings raised from

lectures and tutorials were easily clarified informally. The adoption of an informal, non-directive and collaborative approach encouraged open discussion of psychology related issues, leading to a better understanding of the psychology course. In summary, they quote one of the students; 'It really helps knowing that you are going to have someone around to help you…' (Bakhshi *et al.*, 2008, p. 66).

In popular discourse, the term self-regulation or autonomous learning implies an element of independence, self-control and perhaps self-discipline. However, research into self-regulated learning extends beyond the issue of how learners resist impulses and regulate their concentration. Teachers are asked to try and encourage students to take responsibility for their own learning, seek assistance when it is needed, manage their time effectively and monitor their own performance (Schunk and Ertmer, 2000). Duckworth *et al.,* (2009) concluded that whilst students were taught strategies for better learning, they also needed support in developing the belief that they could learn more effectively.

A distinctive body of research into the self-regulation of learners incorporated motivation into learning strategies and self-concepts. Zimmerman (2008) suggested that self-regulated learners were those 'meta-cognitively, motivationally and behaviourally active participants in their own learning process' (Zimmerman, 2008. p. 166). Empirical studies supported the complex relationship between autonomously working students and their academic achievement. These studies, using children, showed that those with a greater self-regulation and adaptive personal skills could become more proficient readers (Pressley, 1995) have better attention longitudinally, (Yen, Konold and

McDermott, 2004) and improved students' subsequent academic achievement in literacy and numeracy (e.g. Duncan *et al.*, 2007; McClelland *et al.*, 2000).

Duckworth *et al.,* (2009) concluded that students in learning classrooms, which tended to emphasise the importance of self-regulation, exhibited high levels of concentration and attitudes directed towards educational and personal progress. Even low-achieving students exhibited relatively high self-efficacy. '…They believe that they can learn and improve, and they do not shy away from the more challenging tasks' (p. 2). On the other hand, Duckworth *et al.*, (2009) explained, in classrooms where teaching practice largely involved simple, closed activities, focusing on a narrower range of skills, low- achieving students actively avoided challenging tasks and revealed perceptions of low ability.

However, not all students are able to work independently. Duckworth *et al.,* (2009) cited Paris and Newman (1990) who found students often adopted 'defensive' approaches to learning, avoiding failure by procrastinating, choosing easy tasks or avoiding work all together. Lardon (2008) suggested in order to give our absolute best concentration to a task we should remove all physical and social distractions so that full focus on the task was possible suggesting 'the quality of our performance is a function of the intensity of our focus' (Lardon, 2008, p. 75). Thus one's self-regulation of the social environment also related to the ability to determine whether you needed to work alone or with others, or when it was time to ask for help from a peer, a teacher, text book or internet source (Zimmerman and Risemberg, 1997).

In conclusion, learning is an active process, whether with others or without. Effective learners operate best when they have insight into their own strengths

and weaknesses and access their own strategies for learning and meta-cognitions (thinking about how they learn). Learners develop at different rates and at any time some learners are more 'ripe' for learning in some arenas than others. Phielix *et al.*, (2010) suggested both cognitive and social processes were necessary to collaboratively complete a task, solve a problem or construct knowledge (Kreijns *et al.,* 2003). Some students are more social than others and have different intelligences, (Goleman, 1995), (Gardner, 2008). Other students' built environments are more conducive to collaborative learning with some designed to achieve functional as well as academic friendships (Easterbrook and Vignoles, 2014).

Pinker suggested 'simply by making noises with our mouths we can reliably cause precise new combinations of ideas to arise in each other's minds' (Pinker, 1994, p. 15). Although as Littleton and Mercer (2013) pointed out, this made no reference to the embarrassed listener who realised later that they had completely misunderstood what was meant. However Vygotsky's (1978) central notion fostering a zone of proximal development, pushing as much as possible to the upper boundaries can only, he argues, be achieved in a social process. The scope and nature of socially based learning relationships has been documented. To follow, I offer a brief summary of this section.

Summary of Literature Review - LEARNING

In this section I have offered a socio- cultural / psychological perspective on the process of learning alone or in groups. The appeal of the socio-cultural theory grew from Vygotskian foundations using students' explanations and cultural understanding to inform their thinking and language. The scope and scale ofthe fields of research on which I have drawn are disparate but helped me to understand how we think and learn together. Combining the theories proposed by psychologists helped me to understand the processes involved in collective thinking and knowledge sharing where language played a central role. In order to justify my structure I have drawn upon reserach specifically on learningalone and learning in groups in order to highlight the particular strengths and limitations for post-16 learners.

In the next section of this chapter, I discuss the literature supporting the notion of self, self-concept and explicitly academic self-concept. The concept of self cannot be divorced from learning and in the first section of this literature review issues relating to self have already been touched upon. These psychological constructs are of great relevance to the educational context in which the study is founded. However there is a bridge between the literature on learning and that of the self where the learning environment needs to attend to the students' wellbeing and sense of self.

SELF: Introduction to Literature review

In this section of the literature review issues of self, self-concept and academic self-concept are discussed. In doing this, research into self-efficacy, self-confidence and self-concept which have often been confused and merged are clarified. This literature underpins the research question, which is to investigate whether an improvement in their self-concept may lead to higher attainment in the transitioning world of sixth-form students.

The whole learner – a bridge to the self

Educationalists and psychologists have spent decades discussing and revising models of learning to help teachers and learners understand how learning actually works. Pragmatically theorists focused on strategies and tools, pedagogies and philosophies as well as psychological factors. Explorations have followed a number of different paths, which Lambert and McCombs (1998) divided into subgroups which included; goals of the learning process, thinking about thinking, context of learning, motivational and emotional influences on learning, intrinsic motivation to learn, effects of motivation on effort, social influences on learning, individual differences in learning, which are specifically of relevance to this study. This study focused on some of these aspects, for example the context in which a student learnt, and the influence of social and emotional aspects of learning.

Lambert and McCombs (1998) developed a learning-centered model for successful American schools which focused on interventions to understand student needs, interests and learning capacities as well as understanding the

personally and socially constructed nature of the learning process (Brooks and Brooks, 1993). This study, inspired by such aforementioned research, also had the students' interests and experiences as focus. Investigating the psychological processes and concepts involved in learning was of great value. For example Zimmerman (1996) found allowing students an increased element of choice and control resulted in students displaying greater levels of efficiency and resourcefulness as learners. New pedagogies and creative uses of technologies (Fullan and Langworthy, 2014) as well as their feelings of competency and raised levels of enjoyment in their academic work (Deci and Ryan, 1991) were also shown to increase, both of which have been revealed in the context of this study. Illustrating the power of engagement with social constructivist ideals, Gergen (2001) quoted from his personal correspondence where an American school initiative allowed gifted students to create their own learning curriculum. Here groups came together at the beginning of the school year with an empty classroom and nothing entered the classroom unless the students brought it themselves. By the end of the year the room was packed full of ideas and imaginings of knowledge all of which had emerged from their youth culture, illustrating that education was not a passive reception of knowledge and facts but an active, personal process that was highly relevant to students' lives.

McCombs (1998) summarised that attending to the 'needs of the whole student in achieving high academic standards' (McCombs, 1998, p. 380) was a more successful and holistic approach to educating learners. Understanding this 'wellness' (Mills, 1995) of students was crucial. Making an attempt to address the cycles of negative thinking, feeling and behaving that often led to a student 'dropping out', an understanding of the self-concept of the learner was achieved.

Their negative 'wellness' could interfere with their success becoming a barrier to effort and training in skill-enhancing strategies.

Allowing students to choose with whom and how they worked, allowing socialising time and facilitating activities that involved active social engagement attended to the students' social needs. This sentiment, especially in the process of post-16 education was relevant to this study, facilitating social situations may in fact strengthen student learning. I suggest that encouraging students to work together in dyads and groups could enhance their knowledge. Further the student groupings may offer each other structured or unstructured guidance in reducing anxiety regarding transitional experiences. Getting students more involved with other students, identifying who may need help or even including them in a 'biscuit-rota' may mean their feeling of belonging and wellness is enhanced.

Control over learning also came via policies. Emerging from the Frankfurt school of sociological thinkers, the rise of feminism in the 1960's and 1970's and perhaps policy changes within personal and civil rights, the notion of power and authority in education fuelled newer pedagogical theories. Critical thinkers such as Habermas (1981) and Forst (2011) joined the political debate calling for rights to justification and learners began to experience more control. Policies such as 'Every Child Matters' in 2003 shifted the focus. One of the goals was for children to 'make a positive contribution' to the life of the school, giving rise to initiatives such as a 'student voice', school councils, 'personalised learning' (Pollard *et al.*, 2004). The Guardian newspaper reported the children's commissioner for England as saying 'we want schools to consider the views of pupils on matters that affect them' (Bennett, 2012, p. 1).

The comprehensive policy changes of Every Child Matters (ECM) led to a systematic change to a number of areas pertinent to student and childrens' learning in England; Targetting specifically services around the young person, supporting parents and carers, developing and changing the workforce, culture and skills comprehensively across all age ranges from 0 to 19. As a result the implications for schools were significant. Although Local Education Authorities were at the forefront of these changes, schools and their governing bodies were responsible for children's holistic development; social, emotional and cognitive. Their goals centred around five key areas; be healthy, stay safe, enjoy and achieve, make a positive contribution and achieve economic wellbeing.

Further guidance issued by the UK government in 2007 ensured all authorities and schools had 'sufficient opportunity', were able to clearly 'contribute to a delivery of those priorities' and administer the outcomes of ECM, and additionally Children and Young People's Plan (DfES, 2007,p. 12). Students even began to make pivotal decisions in the recruitment of staff, (Richardson, 2011) their position moving towards egalitarianism.

Although this egalitarianism may not appear to be as common in UK schools as in France or Germany for example, some schools may have begun to adopt a more constructivist philosophy rather than an outdated instruction, reception model where the teacher always held the power, and stood at the front as a sage.

Making the distinction between exogenic (focused on teacher giving information with empiricist underpinnings) and endogenic (where knowledge is achieved

through an inner state enabled through discussions) educational philosophies and institutions Gergen (2001) argued remain hierarchical. Experts were still in the classroom 'feeding' hungry students with knowledge described by Freire (1985) as the 'nutritionist' model. In order to counteract the effects of a purely exogenic acquisition of knowledge without an emotional reflection integrating personal values, politics and governments have made attempts to amend the educational process. This study embraced the endogenic underpinning. Sixth-form students were in a new learning state and context, and a transitional emotional state where they were thrown into new classes with people they did not know and given free periods in which to mingle socially in a common room, which were new experiences. Endogenic would allow a 'durable' knowing and a 'learning that lasts' (Hakel, 2001) as it was learner and community centered.

In the UK, the focus of policies such as Every Child Matters (ECM) introduced in 2003 encouraged teachers to assess their students based on Maslow's (1954) hierarchy of needs (physiological, safety, belonging, self-esteem and self-actualisation). Adding this in terms of policy, the focus of the pedagogy was to keep the learner at the centre, but to emphasise their wellbeing as an integral part of the learning process and to sensitise teachers to the importance of their students' experiences. However I suggest many teachers were quite offended by this policy, as they had previously considered this as integral to their professional practice and vocation. The change of focus may have been beneficial to encourage teachers and stakeholders to look closely not at a class of learners, but instead at each individual student and see their specific needs as a learner. Hoyle (2008) suggests that ECM may even run contrary to our vocation and calling: 'to participate in a favoured way of thinking that glosses over, or institutionalises the invisibility of deep structural inequalities in contemporary

English society' Hoyle (2008, p.1). Under ECM, safeguarding for example ceased to be a concern specifically for social workers but instead 'everyone's business', and as Winchester (2008) reports 'this widening of the net has drawn some unexpected differences in local authorities' (Winchester, 2008, p.1) to which the 'centralisation of credit: the diffusion of blame', Hoyle (2008) refers to as juggling and conflicting priorities.

Understanding students' personal and interpersonal concerns were why some socio-constructivist (e.g.: collaborative, shared decision making tasks) strategies worked so well (Bruffee, 1984; DeCiccio, 1988). In evaluating why and how effective learning occurred at post-16, three models could be clearly identified in a UK context. Firstly, the social-constructivist model which favoured open ended questioning, discussion and discovery; secondly the reception or performance learning model where the teacher led the learning and students received the knowledge; and thirdly the co-constructivist model where students relied less on the teacher. Carnell and Lodge (2002) explained co-constructivism relied on dialogue between learners and collaboration with others. It took into consideration the emotional aspects of learning, group dynamics, as well as the purpose and effects of their learning. They argued that this type of learning was not common in schools, as it involved full conversations in a spontaneous way, where dialogue involved 'engagement, openness and honesty' where students are able to say they have changed their view... they have made a mistake, or are able to say they are uncertain…giving learners time to explore, push ideas, and the group is used as a resource' (Carnell and Lodge, 2002, p.15). Hargreaves (2009) explained how rare this was. Communication between pupils and teachers tended to be 'notoriously one sided' and led by 'Powerpoint' with a few

questions and answers as she put it to 'stimulate curiosity or awaken their prior knowledge of a new topic' (p. 80).

Hargreaves (2009) and Pring (2004) report students rarely needed their own ideas and experiences. They are 'selected' or effectively 'streamed' for post-16 by their GCSE teachers. I reported this in an early document where students claimed 'I don't really know how to study' (Bone, 2013, p.11). Students felt their learning had been superficial and that it had not prepared them for independent study. Similarly when discussing time to cooperate and learning together Hopgood (2014) suggested schools devote very little time and space for play as he argued this was the time when new ideas were generated. 'People need time to develop ideas that can grow into concepts and can change and enhance our lives… through play we learn to experiment, we test things out, we make mistakes, we discover new things… we learn to connect and cooperate… to share ideas and build as part of a team' (Hopgood, 2014. p. 30).

If students were less superficial in their learning, more prepared for independent thinking and followed Miliband's ideas of 'deep learning' (Sims, 2006) a co-constructivist learning philosophy would be a more effective strategy. Here small groups could enhance learners' control and responsibility rather than relying on a single teacher. Carnell and Lodge (2002) argued students who were to be effective, in a 21st Century world, needed to encourage 'confidence in dealing with complexity, flexibility and making connections. It encourages people to learn together, and above all it can help learners to become explicit about their learning' (p. 16). This concern was by no means a new one, in 1993 Pring expressed his concerns that 'education' should be encouraging students to develop their capacity to think and reflect.

Convinced by the idea of students thinking, learning and constructing ideas without the teacher always present, supporting each other horizontally rather than an over-reliance on a vertical teacher-led framework, the lens of social-constructivism formed the philosophical basis for this study. The study aimed to capture the lived-experience of students transitioning into a new academic world of often abstract and independent thought; of self-directed study and free periods and keeping the learner at the centre was the focus of this work. The lens of co-learning where the teacher is not always at the centre maximises student talk, and although some of this talk might seem trivial to the outsider, this study took it seriously in order to gain a full understanding of the student learning experience.

After setting the learning lens in this way I introduce the psychological construct of self-concept and academic self-concept and how this concept fitted not only into this study but is an integral part of the sixth-form learning experience.

The history of self–concept

In order to understand how people control their behaviour, psychologists looked into the idea of self-concept. For psychologists the self-concept was a major component of individual cognition (Marcus and Zajonc, 1985). For sociology 'it is both a product and a social force' (Rosenberg, 1989, p. 34) and according to psychoanalysis, Erikson (1968) referred to self-concept as a source of psychological stress and conflict.

An individual's self-concept works as internal regulator of thoughts, feelings behaviour and emotions. It interprets and organises our ongoing experiences as

well as being able to reflect on our past experiences and actions. In this way psychologists suggest our self-concept will shape our behaviours and motivations to engage in activities we feel good or negative about. If we feel we are able to succeed well in a task, psychologists express this as a high or positive self-concept. In this way we are more likely to engage in behaviour if our self-concept for that behaviour is high.

According to Purkey (1988) self-concept was an organised and dynamic system of learned beliefs, attitudes and opinions that each person held to be true about his or her personal existence. Most researchers agreed with the 'organised' and 'stable' quality. This was because if self-concept frequently changed, then the learner would lack a persistent and dependable personality. This was a double-edged sword, as if a learner had a positive self-concept then stability and persistence as personality traits benefited the learner, however a negative self-concept took time to change. A negative self-concept could result in a lack of motivation for the subject. In this way the more central a particular belief was to one's self-concept, the more resistant one was to changing that belief.

Hattie (1992) quoted one of the founding fathers of psychology, William James in 1890 in his classic work the 'Principles of Psychology' where he devoted the longest chapter of the book to what he called the 'Consciousness of Self'. Here he considered self-concept to be the multidimensional, hierarchical, and the 'social self'. He explained the social self was the feeling of positive regard and recognition you got from your friends, a social self - where a 'man has many selves' and the self is the 'sum total of all that he CAN call his' (James, 1890, chpt 10).

A number of conceptualisations and beliefs are held about what self-concept actually is. These synonyms include self-identity, self-regard, self-confidence, self-efficacy and self-esteem. In order to avoid further confusion I refer to the empirically tested model presented by Shavelson, Hubner and Stanton (1976) who were the first to develop a hierarchical model of self-concept.

This Shavelson, Hubner and Stanton model (1976) shown in Figure 3 suggested self-concept was multi-dimensional consisting of global self-concept which comprised an academic and non-academic self-concept (social, physical and emotional and also in specific school subjects – in this study psychological academic self-concept was investigated not 'Math' or 'English'). In the Shalveson *et al.*, (1976) model general self-concept was divided into a series of hierarchical substructures, academic and non-academic concepts. For example a physical self-concept (what you thought you looked like or how able and capable you felt you were at physical activities such as hockey) was of value to physical education teachers and perhaps counsellors of eating disorders where physical appearance could be assessed. However the issue of the stability of the self-concept was questioned.
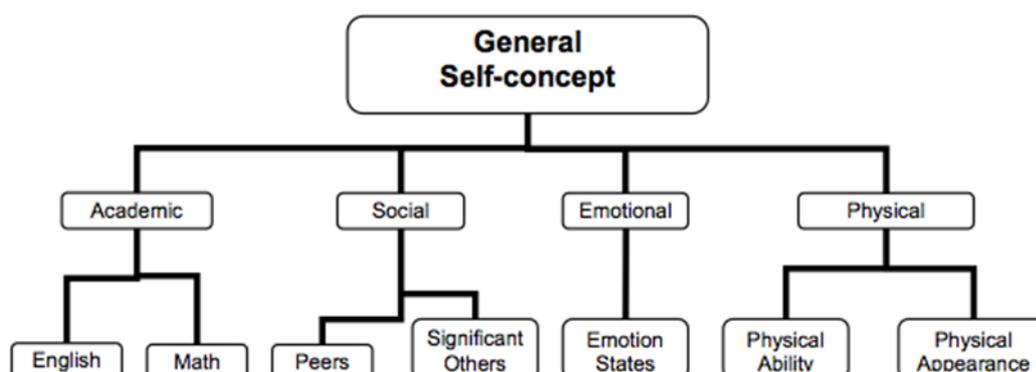
Figure 3 A general self-concept proposed by Shavelson, Hubner and Stanton (1976)

Mercer (2011) explained because of the issue of stability the definition of self-concept was fraught with difficulty. Mercer's perspective on self-concept was that of a dynamic, multidimensional psychological construct, which not only influenced but also was affected by a student's social context and interactions, which may vary across situations and settings. This meant that self-concept was a measure of one's 'self-perception' (Mercer, 2011, p.14). The academic self-concept element of general self-concept was of great interest in supporting transitioning students and this substructure was of interest for the present study. Furthermore I suggest the premise held by Mercer that self-concept is dynamic and flexible was crucial to this study. If the measure of self-concept was static then there would be no benefit to a pre and post-test and a change over time would be without value.

Self-concept is as Marsh *et al.,* (1988) explained not the facts about oneself, but instead what one believed to be true about one self. Knowing this, I suggest that a comprehensive definition of academic self-concept for the purposes of this study is best borrowed from Mercer's successful definition, which defined what this study investigated:

> 'Academic self-concept is thus an individual's self-perception of competence and their related self-evaluative judgements in the academic domain' (Mercer, 2011, p.14).

The notion of a hierarchical self-concept was disputed by Hattie (1992). He stated that there was surprisingly weak empirical support to suggest the social self was higher than a spiritual or material self. Hattie (1992) explained that by knowing that self-concept was not perhaps as static a concept as originally

perceived, and that the ordering of hierarchies between individuals may vary a non-hierarchical structure was of value. Hattie explained self-concept instead in terms of a rope analogy borrowed from Wittgenstein's (1958) maxim that the strength in the rope 'lies not in one fibre running throughout its length, but in the overlapping of many fibres; (Wittgenstein, 1958, section 67) the strength of 'the fibre is not from any one strand but from the overlapping of many fibres' (Wittgenstein, 1958, cited in Hattie, 1992, p. 50).

Hattie (1992) explained our self-concept was a set of descriptions and expectations that we attributed to ourselves. Later Hattie (2003, 2004) proposed a more complex constitution of fibres or dimensions that intertwine. With reference to his rope analogy the complexities were increasingly well explained.

Developed by Hattie (2004) as proposed by Wittgenstein (1958), the analogy of a rope served to simplify this highly abstract construct of self-concept. He explained when a rope was manufactured a combination of 'fibres' were fused and tightly intertwined to create a solid dependable construct. Like the rope, Hattie (2004) saw elements of self-concept all contributing to the generation of one solid self-concept rather than one component overpowering all others. He suggested the rope was made up of strands, yarns and fibres. The strength of an individual's self-concept was not just the sum of the three parts but strength in the twining together of the three components (see Figure 4). The 'tightness' of the rope therefore indicated a strong and robust self-concept. As I was getting to grips with the complex models of general self-concept and academic self-concept I thought Hattie's rope model made sense, and I found solace in the simplicity of his analogy.

Figure 4 Hattie's rope model of self-concept (2004)

The moment we entered formal education we were continually presented with a series of challenges, even to try and remember a set of symbols next to the peg where we were asked to hang our coat on the first day at school. In order for us to learn and meet these challenges, whether it involved learning German vocabulary or the intricacies of the dopamine reward system, risks needed to be taken. The rope was our very being, who we were or even our self-identity and was a combination of strands – self verification and self-protection; yarns which were uncertain personal control, fear of failure and anxiety; and fibres which he saw as the self-regulatory defence mechanisms, self-comparison and monitoring strategies. Sixth-form students were in a position where they had to admit to themselves that they either met the requirements or lacked the skills required to learn the skill. Their self-concept was therefore a woven combination of fibres, yarns and strands. This is referred to in detail later in Table 6.

The notion of self-concept, capturing and measuring its sentiment, was further supported and extensively researched by Marsh and his colleagues in the SELF (Self-concept Enhancement and Learning Facilitation) Project (2000). Here an overwhelming body of contemporary research pointed to the relationship between self-concept and academic achievement. In fact a significant body of

knowledge suggested academic self-concept and academic achievement have a reciprocal effect (Marsh and Yeung 1997 and Byrne 1996). Teachers often make claims about the relationship between self-concept and academic achievement and write in students' reports about 'believing in themselves and not getting too worried about the exam pressure'. One of the roles teachers have is to make students feel 'good' about themselves by activating a student's academic self-concept. Academic self-concept and attainment relationships will be clarified in detail later.

From a humanistic psychological perspective Rogers (1959) saw self-concept as age related and divided up into three components, the 'self-image', or the actual view you had of yourself, 'self-esteem' or self-worth the particular value you placed on yourself and lastly the 'ideal self' which he defined as what you wished you were really like or what you aspired to be. Psychologists investigated these concepts in many ways. Gergen (1965) for example in an experimental study on self-esteem asked participants to talk openly about themselves and were then either positively or negatively treated. The participants who had been treated positively by another were shown to have an increased self-esteem over the negative and control condition. These investigations revealed the strength of impact others had in shaping our view of ourselves. Gergen (1996) wrote 'As I reasoned, then, an individuals' self-esteem can be shaped from moment to moment by others' expressions of esteem for them' (Gergen, 1996, p. 2). In terms of real life classroom experiences every teacher in any classroom could report the effects of positive regard by others and of course how positive peer regard and teacher reinforcement and belief were powerful tools to boost student self-esteem. The effect of positive regard of others was seen in the present study

where other group members and the peer guide gave encouragement and hope to students who found the transition difficult.

In the early 20th Century 'Psychodynamics' produced a treatment, 'psychoanalysis'. This looked at the tripartite psyche and the conflict within a personality, (deriving primarily from conflict between the id, ego and super-ego). Although all about the tripartite self, strangely Freudian theorists were not overly concerned with defining self-concept despite the fact that the idiographic concepts of psychoanalysis were built on the deepest layering of selves and a conscious awareness of self. Although understandings of ego defence mechanisms such as denial, projection or sublimation were essentially to protect the ego and defend one's self-esteem the self-concept itself was not studied or explained. It was not until the neo-Freudians such as Horney in the 1950's, who developed her psychoanalytic theory with self-concept at the centre, that self-concept became a concern. Rosenberg (1989) explained a negative self-concept was as Horney (1950) suggested, 'as a result of certain adverse life circumstances, the individual develops a profound insecurity and apprehensiveness… labelled basic anxiety' (Rosenberg, 1989, p. 42).

Finally in terms of a sociological understanding, self-concept 'is both a social product and a social force' (Rosenberg, 1981). Cooley (1912) set about explaining his famous 'looking glass self' metaphor highlighting the interest to micro-sociologists. An individual's self-concept evolved as a product of social interactions and that 'society and self are twin born' (Rosenberg, 1989, p.37). Mead (1934) stressed the importance of 'taking the role of the other' in the process of social interaction and hence social interactionism evolved as a sociological paradigm. Thus a student self-concept and self-image of themselves

as a successful academic emerged as a direct result of other students seeing them study successfully. These experiences and confidences emerged perhaps as a result of collaborating with others successfully in a study group.

Sociologists understood Mead's (1934) 'presenting-self' and 'desired-self' as firmly embedded in phenomenological and social-interactionist frameworks. Due to this, not all sociologists were interested in studying self-concept. Functionalists such as Durkheim, from a positivistic paradigm for example, found self-concept of little value as ideas that could not be quantified as he put them as 'social facts' in terms of quantifiable elements of society, were of little interest.

At this point I explain self-concept further and later clarify academic self-concept and how it relates to a student's experience.

Self-concept clarified

Confusingly the two terms 'self-concept' and 'self-esteem' have been used interchangeably. Although they are both reflective processes (what you think of yourself and what other people might think of you, including imagining what others think of you) the differences between the two lie in feeling. Self-concept refers to information one has about oneself e.g. where a student knows what they are like and how they can learn best. Whereas self-esteem refers to how a student feels about the things they know about themselves (either positively or negatively).

However many researchers use the terms self-concept, self-esteem and self-efficacy interchangeably and it is difficult to tell them apart as Mercer put it the

'three types of self-belief constructs are frequently confused' (Mercer, 2011, p. 15).

Table 5 makes an attempt to clarify the constructs. Additionally, Franken (1994) suggested that self-concept is related to self-esteem in that 'people who have good self-esteem have a clearly differentiated self-concept...When people know themselves they can maximize outcomes because they know what they can and cannot do' (Franken, 1994, p. 439).

Table 5 provided continual solace as a source of reference during this research, as without a clear definition and hierarchical structure I found the overlapping terms confusing. I appreciated that terms are defined and interpreted differently by researchers, and some studies have shown preferences for measuring academic self-concept rather than academic self-efficacy. However a complete clarity and mutual exclusivity is perhaps not possible in practice.

As mentioned previously Mead (1934) and Cooley (1912) saw a successful academic self-concept emerging as a result of reflected appraisal and social comparison. Students tended to rate and rank themselves in relation to others, they self-assessed their failure, anxiety and frustration as well as compared and competed, this resulted in the building of self-concept as well as self-esteem. Although the importance of this psychological concept is of great relevance to this study and educational attainment (Rosen *et al.*, 2010) there are other major implications of self-concept.

Branden (1994), an eminent philosopher and psychologist quoted at the SELF-conference proceedings (2000) stated the huge significance of self-concept;

'I cannot think of a single psychological problem – from anxiety to depression, to under-achievement at school or at work, to fear of intimacy, happiness or success, to alcohol or drug abuse, to spouse battering or child molestation, to co-dependency and sexual disorders, to passivity and chronic aimlessness, to suicide and crimes of violence - that is not traceable, at least in part, to the problem of deficient self-esteem' (Marsh, 2000, p. 2).

Psychological construct	Explanation	Psychologists
Self-esteem	This is the most global construct and is related to our value system and self worth. This is the broadest of all three constructs, i.e.: represents your <u>overall</u> feeling of worth. This is the most evaluative construct: **FEEL**	Harter (1982, 1998)
Self-efficacy	This construct is tied to specific tasks. It involves cognitions and expectancy beliefs. Self-efficacy is an ability judgement to perform a specific task i.e.: how <u>good</u> you think you are at something. This is seen as the most cognitive construct. 'Academic self-efficacy' – a belief or confidence that a student holds about their academic competencies: **TASK**	Bandura (1997) Bandura (1986, 1997)
Self-concept	This contains cognitive and affective elements and includes self-perception, self-evaluation and competence in a <u>specific </u>domain. These self-appraisals contain prescriptions, descriptions and expectations we attribute to ourselves: **KNOWLEDGE**	Marsh (1990) Shavelson, *et al.,* (1976), Hattie (1992), Burns (1982)

Table 5 The clarification of self-concept, esteem and efficacy

I suggest that a sixth-form student, who has a positive self-concept or positive view of self, feels confident. They are students who will 'have a go'; they feel capable as well as competent. Onlookers tend to react positively towards this and in turn validate the learners' feelings and view of confidence and competence. These self-confident learners are well adjusted to social situations. On the other hand, those people who lack the positive self-belief direct blame internally and doubt their capabilities, which contributes towards a negative self-concept. In this scenario if a student experiences uncertainty or a lack of confidence, this may result in a lack of competence which validates a negative feeling of self-worth from one's self and via others.

Erikson (1950) famed for his psycho-social stages suggested that in adolescence (i.e. sixth-form learners specifically) the 'identity vs. role confusion' resulted in a 'Sturm und Drang' (storm and stress) where personal and social conduct lost its balance and at each stage a positive dealing led to a positive self-concept whereas a negative dealing led to a negative self-concept. It followed therefore that those students with a robust self-concept may have a buffering against the constant barrage of in- and outflow of information about themselves. These buffers as Hattie's (2004) strands and fibres infer, self-enhancement and self-verification and self-protection strategies made the self-concept stronger.

As a teacher I often hear students using these strategies and I tend to agree with Hattie (2009) when he suggested the willingness to invest in learning, gaining a reputation as a learner, to show openness to learning, coupled with the active choice of these strategies tended to be the deciding things that are likely factors linked to educational success rather than the level of self-concept. Returning

marked essays to students with both positive and negative comments, their self-protection of 'oh well I didn't try very hard on that anyway' or 'I'll never really get any better at these tasks – I may just as well give up' are the buffers to which Hattie (2009) referred.

Back in 1982 Harter noted adolescents, for example, organised their self attributes in a particular manner: their positive self-aspects were their core whereas their negative self attributes were 'relegated to the periphery of the self-reflecting the fact that they are judged to be the least important aspects of one's personality... Thus, one's positive and negative attributes would appear to be filtered through a protective lens that accentuates the positive while de-emphasising the negative' (Harter, 1982, p. 63). Protecting 'our-selves' from failure and 'mental scratches' (Nicholson, 2015) are perhaps the most useful strategies employed by adolescents in the constant barrage of positive and negative experiences to protect their academic self.

Returning to Hattie's rope analogy the 'yarns' of self-concept could trigger a variety of self-orientations or dispositions depending on the situation. These self-orientations assist us in maintaining a sense of stability such as self-efficacy, or anxiety about a potential failure. It seems students employ a multitude of dispositions depending on the need to protect the self and self-esteem. Hattie (2004) used Table 6 to clarify the strategies and this has been a useful reference tool.

ROPE	STRANDS	YARNS	FIBRES
A. Our very being/ life/ existence/ who we are/ self-concept/ self identity	B. Primary motives	C. Situation-specific orientations/dispositions	D. Strategies
	Examples: Self-verification Self-enhancement Self-protection	Examples: Self-efficacy Performance or learning orientation Uncertain personal control Fear of failure Anxiety	Examples: Self-handicap Regulation of expectations (e.g. defensive pessimism) Discounting/distortion Perfectionism Social comparison Self-monitoring

Table 6 Hattie's strands, yarns and fibres explained in detail.

Erikson writing in 1959 explained;

> 'the sense of ego identity, then, is the accrued confidence that one's ability to maintain inner sameness and continuity of one's meaning for others. Thus, self-esteem, confirmed at the end of each major crisis, grows to be a conviction that one is learning effective steps toward a tangible future that one is developing a defined personality within the social reality which one understands. The growing childs must, at every step, derive a vitalising sense of reality from the awareness that his individual way of mastering experience is a successful variant of the way other people around him master experience and recognise such mastery' (Erikson, 1959, p. 89).

For a sixth-form student, I suggest he confirmed that successes and failures enabled the self to flex with each challenge and bounce back in terms of academic buoyancy from the transitional stresses and strains of the 'A' level experience.

If self-esteem refers to how a student 'feels' about the things they know about themselves, then self-efficacy is tied to a specific task e.g.; how well you can perform a particular task. However Bandura (1997) defined self-esteem as distinct from self-efficacy suggesting 'perceived self-efficacy is concerned with

judgements of personal capability, whereas self-esteem is concerned with judgements of personal worth' (p. 11). In fact I think Bandura's self-efficacy looks very much like one of these 'yarns' described by Hattie (2004). Bandura was pioneering in suggesting those students with a higher sense of self-efficacy in mastering academic tasks tended to learn both in formal school settings and informal settings (1986, 1997). Further he illustrated a huge facet of learning and achievement was linked to one of these yarns. Bandura (1997) in his classic work entitled 'Self-efficacy' wrote:

> 'Students who come well prepared cognitively and motivationally learn quickly and are adequately served by the prevailing educational practices. There are numerous social critics, however, who believe that, for many children, the school falls short of accomplishing its purposes. Not only does it fail to prepare the youth adequately for the future, but also, all too often it undermines the very sense of personal efficacy needed for continued self-development. Recurring difficulties encountered with low achieving students erode teachers' sense of instructional efficacy… Inefficacy feeds on itself' (Bandura, 1997, p.175).

I tend to agree with this statement and this is unfortunately illustrated in education's detrimental obsession with assessment regimes and quantification of grades. These assessment regimes also had an important impact upon learners self-esteem: the fear of possible ridicule from others when a student received a score of 1 out of 10 in their German vocabulary test had a huge impact on the learner. Entwistle (1987) supposed, in a 'society which stresses the importance of both academic and vocational achievements, strong feelings become associated with the judgements made of success and failure. People have to explain these outcomes to themselves' (Entwistle, 1987, p.138). Thus the

instinctual use of self-protection and self- judgements of capability became common survival strategies in a student's environment.

Hattie's (2004) third component to the rope model of self-concept involved fibres (see Table **6**). Here strategies are employed to deflect the cause of failure from their competence and onto the impediments e.g.: self-handicapping strategies are employed with a plethora of excuses (Tice and Baumesieter, 1990) linked to external locus of control for example procrastination, and a reduction in effort (Thompson, 2004) and perhaps engaging in defensive pessimism (Dweck, 1991).

The model of self-concept proposed by Hattie (2004) differs from the set of faculties or set of subdivisions in the model from Shavelson *et al.*1976. Marsh (2006) referred to this model as a 'landmark' (p. 8) and explained how it played a key role in the definitions and understanding of self-concept in psychology-based studies.

However progress by Marsh and Shalveson in 1985 resulted in a revision of the model and Marsh *et al.,* (1988) worked on further modifications (Figure 7). The process and development of self-concept and then specifically general academic self-concept had enabled a complex construct to become tangible in the development of such instruments as the SDQ-III measuring the academic self-concept of adolescents at a highly detailed level. Without these revisions and attention to scientific deductive principles the concept may not have been fully understood.
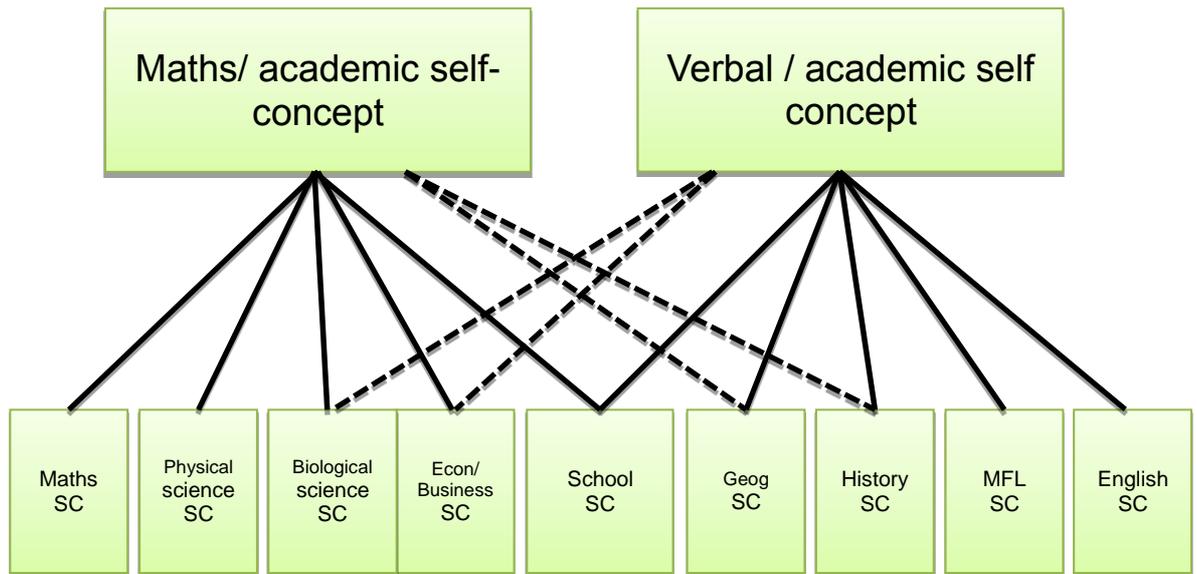
Figure 7 An elaboration on Marsh and Shavelson (1985) Marsh, Byrne and Shavelson (1988)

Constructs such as self-concept are important for understanding the individual as a whole, in many contexts. Burns (1982) suggested knowledge of self-concept was useful in terms of educating the whole person, emotionally as well as socially and cognitively at home and school. He wrote, success in school, work or life depended on how a person felt about the qualities and attributes he possessed. If a student said 'I will never understand this material he is saying more about himself than the subject matter' (Burns, 1982, p. vi). Carnell and Lodge (2002) referred to Dweck's (2000) self-theories of learning and mastery orientations when they explained students who said 'I am no good with numbers' or 'I can't improve my gym skills' prevented them from learning more than any other reasons (Carnell and Lodge 2002, p. 21).

The understanding of constructs such as academic self-concept is hugely beneficial not only for the individual learner but for teachers within the learning process in order to provide support, especially in transitional phases or contexts

in which self-concepts can be nurtured. My exploration into self-concept and academic self-concept has been an invaluable experience and enlightened my understanding not only as a teacher but as a researcher.

Moving from general self-concept to academic self-concept.

As discussed a student's self-concept consists of a set of beliefs they possess about themselves. Hamlyn suggested it is 'the picture of oneself' (Hamlyn, 1983, p. 241). Mercer (2011) believed it is not the facts about you, but 'rather one believes to be true about oneself' (Mercer, 2011, p.15). This self-assessment included an element of competence and 'feelings of self-worth' associated with the judgement in question' (Schunk and Pajares, 2002). Shavelson, Hubner and Stanton (1976) suggested a person's self-concept was a person's self-perceptions formed through experience with and interpretations of one's own environment. They suggested '...a person's perception of himself formed through his experience with his environment' (Shavelson, *et al.*, 1976, p. 411). Thus academic self-concept in this study borrows from Mercer's successful definition, which I felt seemed the most appropriate and would like to reiterate at this point:

> 'Academic self-concept is thus an individual's self-perception of competence and their related self-evaluative judgements in the academic domain' (Mercer, 2011, p.14).

As previously discussed, many researchers have used the constructs of self-efficacy, esteem and concept interchangeably (Table 5 on Page 95) and albeit different, they may in fact inter-twine. Self-concept may also contribute to self-esteem. In other words, if a person had a low academic self-concept in a domain of great personal value, for example their success in 'AS' level psychology, then

this is more likely to have a significant impact on their overall self-esteem than a low self-concept that holds little personal value. However, very little empirical evidence has been found for the existence of this seemingly intuitive relationship (Marsh 1993, and 2008).

Thus academic self-concept is the students' perception of competence in their chosen subject, their evaluations of how good they 'feel' and 'are' about their domain and the facts they have about their own understanding. Students' psychological academic self-concept is therefore better considered at a domain, sub-categorical level rather than a global evaluative level as with self-esteem and self-efficacy.

My understanding of academic self-concept referred to the overall self-perception of a student in an academic context. It was a set of attitudes, beliefs and expectations a student held about their academic skill and performances. Liu, Wang and Parkins (2005) emphasised the role of self-assessed academic ability, claiming academic self-concept to be 'perceived academic competence' (Liu, Wang and Parkins, 2005, p. 571). This perceived academic competence was a useful indicator for students to know how confident they felt about their subject.

The multi-faceted model created by Shalveson, Hubner and Stanton (1976), suggested that self-concept consisted of a global self-concept, which comprised of academic and non-academic components. This premise informed the basis of the blueprint for all three Self-Description Questionnaires (SDQ) developed by Marsh. The SDQIII (Marsh, 1992) was designed to measure multiple dimensions of self-concept for college students and other adults. As was the case with the

SDQII, the SDQIII evolved from the original SDQ instrument, the SDQI, all aimed at and designed for specific age groups. In keeping with its companion scales, the SDQIII had a multidimensional structure that was firmly rooted in the Shavelson *et al.,* (1976) theoretical model of self-concept or 'landmark' as Marsh praised it.

Marsh (1992) developed the Self-Description Questionnaire (SDQIII) instrument originally for use with late adolescents and young adults (16-25 years of age), for this reason the SDQ II (young adolescents) and SDQI (pre-adolescents) were not considered for this study. The SDQIII is currently the most extensively validated self-concept measure available for use with adults. Following the same research strategy as the other SDQ scales, this past decade has seen the SDQIII undergo rigorous extensive testing to establish its psychometric soundness as a measure of self-concept. This is extensively discussed in the methodology.

Marsh *et al.,* (2006) analysed data from the Organisation for Economic Development's (OECD) Programme for International Student Assessment (PISA). This assessment used data from 15 year olds in 34 countries and found positive linear effects of academic achievement on academic self-concept. The associations were greater in size for better students than they were for poor achieving students. The findings of this correlation can be useful. Teachers for example might provide targeted support for students with lower academic self-concept in order that they might assist in raising their attainment.

Relationship between academic self-concept and achievement

The debate as to whether students needed to have a positive self-concept and positive self-image about their studies in order to do well or whether the opposite was the case, was a cause for a great deal of thought. Numerous studies have shown a positive correlation between academic self-concept and academic achievement (House 1993; and Kumar 2001), although this relationship does not imply causation. Marsh (1990) suggested the 'most vexing theoretical question is whether academic achievement influences academic self-concept or whether academic self-concept influences academic achievement?' (Marsh, 1990, p. 646). There were a number of potential models and relationships that could be considered;

   a) Academic achievement determines self-concept.

   b) Levels of self-concept determine the degree of academic achievement

   c) Self-concept and academic achievement influence and determine each other mutually.

   d) Additional factors and variables may be the cause of the self-concept of a learner as well as their academic achievement.

Not only has academic self-concept been used to predict academic achievement but studies have also shown how academic achievement can be used to predict academic self-concept. Cokley (2000) found that a student's grade point average was the best predictor of academic self-concept for African American college students who were attending predominantly white colleges and universities. Although other studies have reported the opposite (Valentine *et al.,* (2004), it seemed that no one could resolve the issue of whether academic self-concept

affects academic achievement or whether academic achievement affects academic self-concept (Byrne, 1996; Hattie, 1992).

Hattie (2009) explained the searches for the direction of causality between academic self-concept and attainment are unlikely to be fruitful and suggested a reciprocal effects model as a pragmatic solution. He suggested that the causality direction between academic self-concept and attainment was more likely to exist with certain self-strategies. The more likely a student was to invest in their learning, show openness to experiences, gain a reputation as a learner, have more personal control rather than learned helplessness were key dispositional features of a successful student. Hattie explained '…It is, therefore, not surprising that teachers have more difficulty changing the levels of achievement of those with non-supportive self-strategies; they may have more success if they addressed these strategies *before* attempting to enhance achievement directly' (Hattie, 2009, p. 47).

Similarly studies where students followed an English as a foreign language course for the first time, revealed academic self-concept not only had a significant correlation with students' listening and reading achievement but was also a significant predictor of students' English proficiency (Liu, 2008). Such studies showed that academic achievement was 'strongly impacted' by academic self-concept in students progressing from first through to third year (Tang 2011, p. 123). Lecturers who incorporated self-attribution and motivational strategies in their lessons could influence students' learning 'persistence which in turn will boost academic achievement' (Tang, 2011, p.127).

Summary of Literature review - SELF

In summary self-concept provided learners with their sense of agency, driving and guiding their behaviours, helping learners to become high academic achievers, be more positively motivated, willing to put more effort into the tasks and set more challenging goals for themselves and generally have a more positive attitude towards their academic study (Green *et al.,* (2006); Hattie (1992); Marsh (2006)). The self-concept of the learner is a powerful psychological construct helping to explain students' varied behaviours, approaches and attitudes towards their studies. The fields of research on which I drew were disparate but helped me to understand how students think and learn.

Kuncel, Crede and Thomas (2005) suggested that American high school students were reasonably accurate about estimating their levels of performance; they knew themselves well and could accurately estimate their understanding and evaluate their achievement. These self-estimations could be a useful tool in predicting where they saw their futures lie, but could also become barriers for some students as they might only perform to the level of their own expectations.

Having reviewed the literature on learning and the self that was pertinent to this study the next section provides the rationale for the methods selected for this research study to provide a rich picture of students' perceptions.

Chapter 2

Methodology

Brief summary of the purpose and rationale for this study

Before I introduce the methods and methodology I summarise the purpose and rationale of my study. This mixed methods study addressed the academic self-concept of transitioning (from GCSE to AS level) students studying psychology and ethics for the first time. A convergent-parallel-mixed methods design was employed, as it is a type of design in which qualitative and quantitative data are collected in parallel, analysed separately and then merged.

Led by a social constructivist perspective Freeman (2009) illustrates how to elicit and understand the lived experiences of students. As a result qualitative data such as from semi-structured, group interviews and video analysis explored students' perceptions of their success and academic self-concept. Students' stories from this analysis were supported with additional data gathered from quantitative methods. The reason for collecting both qualitative and quantitative data was to converge and attempt to validate the two forms bringing greater insight into the research than would be obtained by either type of data separately.

This methodology allows researchers the opportunity to improve their professional understanding of their context and their students' learning (Popper, 1969).

Employing a mixed methods approach enabled me to investigate students' transition experiences in depth. Beyer and Apple (1988) suggested this type of research conducted by teacher-researchers could create meaningful curriculum reform. The aim of this study was to create a valuable reflection upon the lives

of transitioning students, studying at an advanced level of education for the first time. Goodacre (2013), Kincheloe (2003) and O'Sullivan (1999) regard teacher research as an important component of teacher professional learning that contributes to the development of methodologically sound practice.

However interesting it might be for teachers to research their students it is also important to note and to accommodate my identity of teacher/researcher in the study. The study would not have been the same methodologically if I had been an outsider looking in, as a detached teacher or as an objective researcher. Thus teacher/researcher was an exclusive identity in this socially constructivist study.

Working from an underpinning of social constructivism, the purpose of this study was to see whether collaborative self-directed study methods positively influenced the academic self-concept for psychology students transitioning onto a new course in a post-16 environment.

Introduction to methodology chapter

In this chapter the aims, paradigm, research methodologies and approaches including mixed methods of data collection are discussed in detail. The emergence of the tools designed to fit the purpose of understanding the transitional student experience are explained in full. Validated instruments and triangulated methods used in the study whether they offer qualitative or quantitative data are defined and explained in order that a clear methodological credibility emerges for the reader.

The importance of social constructivism as a fluid and unstable description of the world reveals a divergence from traditional experimental psychology. The 'truth' which becomes apparent is not some irrefutable cause and effect revealed from the use of a purist scientific method, but a set of realities that are dependent upon how the students' worlds are perceived, their knowledge was created and constructed and re-constructed through a series of conversations and interactions with others. Furthermore the meaning is dependent upon how I as the researcher have analysed and interpreted the data. The methodology was designed to capture these realities.

Epistemological assumptions and research philosophy

The problem of aligning world view, research and teaching

I would describe myself as a teacher whose teaching is underpinned by social constructivism and it is such a personal experience for me that if lessons are bland and lecture-like I do not really feel I connect with my students unless I can include some of my 'self' in the lessons. As a researcher the need to create a meaningful study was to reject a single data collection method, as I doubted whether only quantitative research would have provided meaningful answers.

I suggest that work based research is about furthering knowledge and understanding which may promote improvements and variations in real world practices. The research philosophy of this investigation has grown from the assumption that students struggle when entering a sixth-form experience to the epistemological assumptions of whether there is evidence that this 'struggling and failure' phenomenon exists, and if so how they can be explored carefully and ethically.

It is important to illustrate the ideology underpinning the research philosophy. Social constructivist researchers make assumptions about aims and how data is collected, collated and interpreted. It is not about identifying objective facts or making claims of absolute statistical probability and significance. There is no one choice of approaching research. Far from my previous experiences of traditional experimental psychology where validity and reliability are major requirements, here accounts are valued more in terms of 'fruitfulness' and 'usefulness' (Burr, 2003, p. 159) as well as 'trustworthiness' and 'soundness' (Wood and Kroger, 2000). Findings can be valid and reliable although as

defined within a social constructivist paradigm and not within an experimental field. As Burr (2003) suggested, the insistence of social constructivism 'the importance of accounts and discourses, often leads logically to the use of qualitative methods as the research tool of choice' (Burr, 2003, p. 24).

However valuable, there is an open acknowledgement in my work that the social construction of my account of students' transition experiences reveals one interpretation. 'Reflexivity' is a term used within social constructivism. This refers to the application of theory and is used 'particularly in the context of research, where the researcher reflects upon their position in the research process' (Burr, 2003, p. 204). My professional and personal views as a teacher and researcher as well as some cultural and political perspectives were also considered. This 'attitude of attending systematically to the context of knowledge construction' (Cohen and Crabtree, 2006), I understood as reflexivity. This is an important aspect of the methods and the findings, and revealed a considered answer to the research question in a 'joint action' where student responses and my analysis were not in isolation from each other.

Mixed method ideology

It seems that educational research falls into two main categories of 'philosophically competing camps' (Pring, 2000, p. 56). One camp embraces the science of education and the other proposes a focus on the subjective experience of learning. There remains, perhaps because of this constant battle, a general mistrust in (Miller, 1999) educational research.

A skepticism in some of the findings of educational research stems from the world-view in which data is collected and analysed; much educational, psychological and sociological discourse regarding student transitions have found a number of approaches in which to base their understanding of reality whether it be 'positivism', 'post-positivism', 'critical theory' or 'constructivism'. Guba and Lincoln (1994) suggested that over-quantification, the received view of knowledge as well as the relationship between the inquirer and student have implications for the message received by the academic community.

Led by Johnson and Onwuegbuzie (2004) and their notion of mixed methods being a useful middle position; 'sitting in the new third chair, with qualitative research sitting on the left side and quantitative sitting on the right side' (Johnson and Onwuegbuzie, 2004, p.3). I embraced this approach, therefore to understand the transitional experience of sixth-form students was to engage both quantitative and qualitative approaches of data collection, appreciating a student cannot be studied in a social vacuum, hence 'value-based issues can contribute to how the focus of the research is decided' (Costley, Elliot and Gibbs, 2010, p. 84).

Constructing a methodological framework and mixed methods approach was not simple. My background as a psychologist where variables are controlled and rigour is achieved contradicts social constructivist theory. Coupled with my position as a professional immersed in the day to day practice as a teacher where targets are a monthly focus and grades in terms as a percentage are student goals. However the data-collection from these two worlds is in fact meaningless unless the students' lives and experiences are held as meaningful components. It is within the daily interactions between people in the course of social life that our versions of knowledge are created and recreated. Without this narrative the data lacks meaning.

Thus, the choice of approach and methods was informed by my dual position of teacher and researcher, my professional and organisational context (i.e.: a practitioner with professional standards) as well as the important practical and on-going ethical considerations. I suggest that this dual position strengthened the narrative; the methodology has increased validity and perhaps even 'trustworthiness' and 'soundness' (Wood and Kroger, 2000). These features have been a major ingredient for the success and honesty of the study and the idea of a highly controlled study investigating 'participants' from a purely objective and traditional experimental stance was rejected.

Constructing this study from an insider stance as 'teacher as a researcher' has also been justified. Pring (2000) explained how 'The complexities of an educational practice can only be fully understood by those whose values, beliefs and understandings make it a practice of a certain sort' (Pring, 2000, p.159), i.e.: those who do the practicing. The justification for the choice of

teacher/researcher lay in the need to embrace both 'footprints' of pragmatic real world and academic rigour.

An attempt to further illustrate the benefits of combining and embracing methodologies is explained in the work of Denzin and Lincoln (2000). Here they promoted the idea of 'bricolage', which derives from the French word for 'bricoleur', a handyman who makes use of the appropriate tools for the appropriate task. Here I suggest 'bricolage' is used to explain the use of a diverse mixture of research methods that are fit for purpose. The bricolage as Kincheloe and Berry (2004) proposed, is not a simple mixing of methods, but demanded numerous levels of contexts and understandings. This research method not only looked at how the meaning was derived but the process by which it was understood. This is complex and the task of a researcher is to uncover the 'invisible artefacts of power and culture and documenting their nature of influence…' (Kincheloe and Berry, 2004, p. 2). Bricolage promoted the use of tools that were best suited to understanding and answering questions about the phenomenon. Denzin and Lincoln (2000) personified this 'eclectic' method as intellectually informed, well read and 'cognizant of diverse paradigms of interpretation' (Kincheloe and Berry, 2004, p. 25). Multiple methods provided richness and depth to this study. The process of weaving and patchworking data together such as the data from the students' self-assessment tool with the data from the semi-structured interviews informed recommendations and themes. In this way, Yardley (2008) suggests the researcher is like a 'a weaver of stories; one who assembles a theoretical montage through which meaning is constructed and conveyed' (Yardley, 2008, p.1).

The present study aimed to illuminate issues across various audiences including students, teachers and the academic community. By making sixth-former's stories available to parents and teachers, this may allow them to identify similar problems and attitudes that their sons, daughters or students may be experiencing.

The study gives account of real lived experiences and aimed for resonance with other students and academics concerned with those transitioning or who manage transitions into an unfamiliar world of 'A' levels.

As a professional teacher an important factor of the mixed methods design was being able to explain how the methods often informed the next stage of data collection and as such how all of the data sources dovetailed into one often messy dataset. Being able to explain the findings to parents, students, senior educational leaders and the academic community was also important to me. The philosophical aim was full comprehension, resonance, clarity and accessibility for all readers. The decision in favour of social constructivism and mixed methods clearly underpinned the dissemination of the study, without this clarity and resonance the work might have appeared to lack trustworthiness. In order to explain this comprehensively to others I devised a flow chart which has been useful (see Page 119).

In a presentation at one of the schools' governor's meeting, my first slide showed a picture of a group of students so engaged in their conversation that they were oblivious to the camera. The image highlighted the importance of in-depth discussions and knowledge sharing at a horizontal level. Here, I suggested, the opportunity to learn together might increase wellbeing, student's

articulacy might be nurtured and 'real' learning achieved where understanding

is brought to life, deepened, and consolidated. The governors agreed with me

which affirmed my belief that psychological and educational research that is not

accessible to all fails at the first hurdle.

For reference to the flow chart overleaf as Figure 9 please refer to the key
below for clarification

Abbreviation	Description
QUANT	Quantitative measures ie.numerically organised data
QUAL	Qualitative measures ie descriptive data
ALIS	Advanced Level Information System
ASC	Academic self-concept
AQA	Assessment and Qualifications Alliance
SDQIII	Self-Description Questionnaire version III – Marsh (1984)
K & U	Knowledge and Understanding

Table 8 Key to accompany flow chart of methods
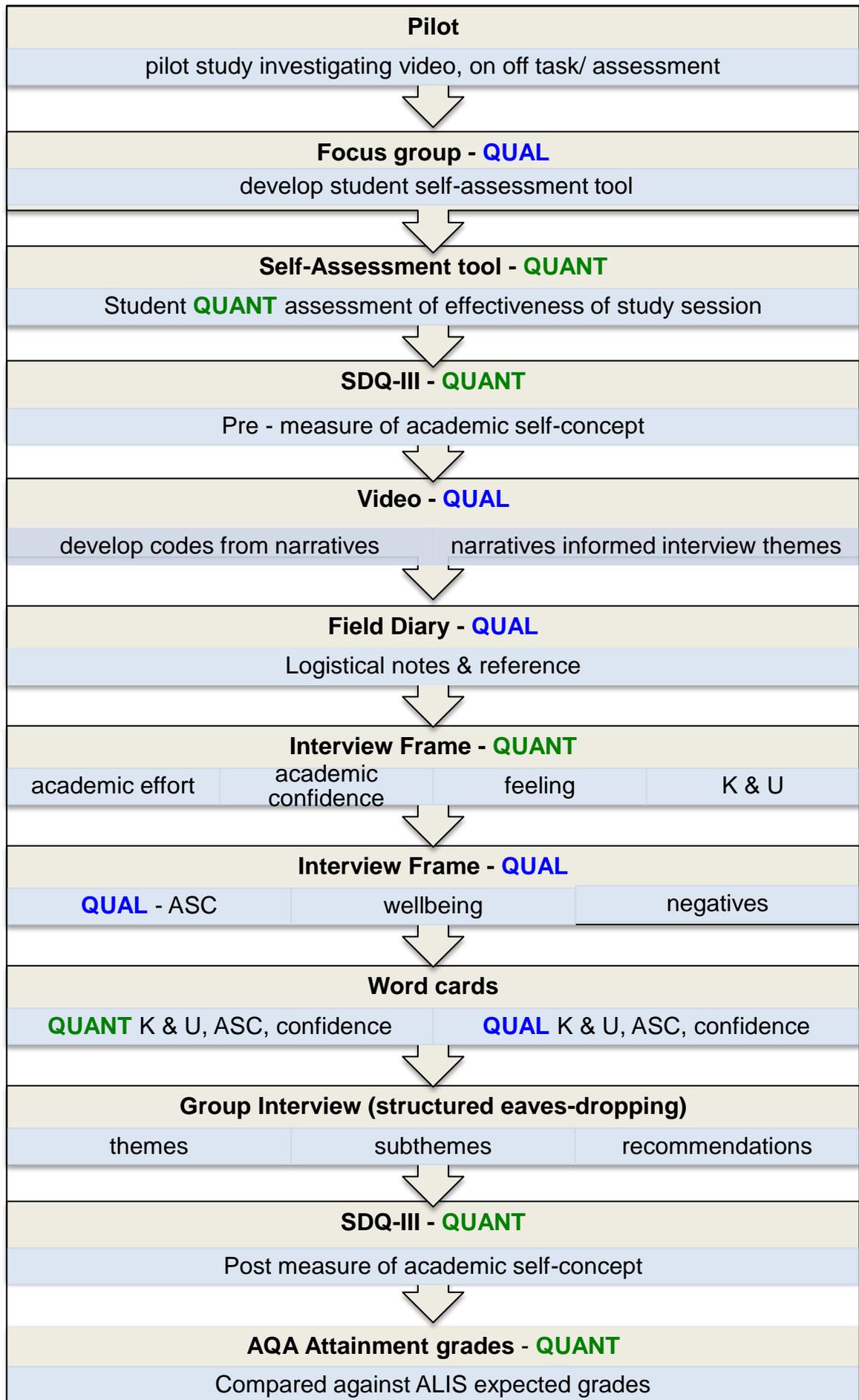
Figure 9 Flow chart of methods and how they inform eachother

Qualitative data in educational research

Qualitative data in the form of descriptions, rich explanations and fruitful 'vivid meaningful flavour' has been one of the staples of a social science diet since analyses began (Miles and Huberman, 1994, p. 1). This type of data provides researchers with rich descriptions of incidents, stories and interactions. There are dozens of ways in which these meanings can be questioned and analysed. Wolcott identifies a large number of styles of collecting data in a 'tree' of educational research strategies (Wolcott, 1990).

It is important to consider that the value of this research comes from pragmatism as the philosophical partner for mixed methods and not from one single method or paradigm. Lister and Wells (2001) for example stressed the unprecedented importance of images and visual technologies in contemporary society and their use in educational research. Arthur, Waring, Coe and Hedges, (2012) suggested qualitative researchers have developed and refined a number of valuable approaches using such evidence as graffiti, films, videos, diagrams and symbols. These methodologies are not without their own bias, and volumes of critique mainly centre on the problem of overcoming the subjective stance. The main purpose of collecting such a variety of visual and personal responses was to experience real and valid data where the students are in effect the 'principal actors in the process' (Arthur *et al.,* 2012, p. 294).

The characteristics of this investigation were originality as well as transparency. This pragmatic investigation was meaningful to the 'actors' in this 'play'. Their experiences in study groups were sensitively and delicately viewed by me as their teacher and as a researcher and their narratives were collected, collated

and analysed. This was valuable both to their own individual study experience as well as setting up resonance for other audiences.

Qualitative research

Many scholars have argued that qualitative research is not scientific (Popper, 1959; Maxwell and Delaney, 2004). Qualitative research is mainly traced back to interpretivism while quantitative research is mainly traced to positivistic paradigms. The political and philosophical stances of governments of the day have dictated a specific collection method. Indeed Cresswell (2003) suggested inquiry needed to be 'intertwined with politics and the political agenda' resulting in an action agenda that may change the lives of the participants, the institutions in which the individuals work and live, and the researcher's life (Cresswell, 2003, p. 9).

The science wars and paradigm debates where education is mathematised, quantified and rationalised ignored the notion that learning is culturally and communicatively constructed. The focus on 'evidence based research' (Torrance, 2008) is ever more prevalent in the EU and the UK. The reasons for this are the focus on what methods are the most effective saving time and resources at the least cost for the taxpayer. Torrance (2008) critiqued this global movement towards scientific 'evidence' and suggested we ought to review our relationship with governmental advisors instead of focusing on now long exhaustive, paradigm wars (Silverman, 2011). The focus on evidence based research however is not simply a matter of cost effectiveness but includes cultural, political and religious emphases. Despite mandates, teachers and authorities remain wary of adopting ideas justified through their own

experiences of 'fads', unjustified claims or due to excessive time, resources and effort to integrate them. Teachers may benefit from a balance of evidence based research with randomised control trials and a narrative based approach.

Mixed methodology allows access to the advantages of qualitative and quantitative methods. Theorists have been eager to emphasise the value of pragmatist methods to educational research as extremely powerful and 'most importantly, investigators who conduct mixed methods are more likely to select methods and approaches with respect to their underlying research questions rather than with regard to some preconceived biases about which research paradigm should have hegemony in social science research' (Johnson and Onwuegbuzie, 2004, p. 23).

In order to emphasise the importance of pragmatist methods the interview serves as an example. Qualitative methods such as semi-structured interviews and group interviews used in my study were critical for gaining a sense of realism, as Maxim (1999) puts it, 'it is where the rubber hits the road' (Maxim, 1999, p. 287). Interview strategies are designed from a variety of philosophies. In terms of a positivistic stance, responses can be seen as 'social facts' i.e.: recording responses with a factual reality. Secondly emotionalism calls for an authentic insight into experiences or an 'observational encounter' where two people come together for the 'purpose of focused interaction' (Denzin, 1970, p. 133). Thirdly, a constructivist philosophy, where the major concern is how the interviewee actively creates meaning.

Semi-structured interviews allow more methodological freedom and room for related and partially-related responses than perhaps a more fixed choice

design. On the other hand there is a need for awareness of the downsides of subjectivity. Choosing a semi-structured interview allowed me to determine what 'was in the student's minds' without me putting it there. Their stories and phrases could not be achieved any other way.

According to the constructivist orientation 'interview data yields the construction of data that represents the mutual interpretation of the interviewer and of the interviewee as the interview proceeds' (Glaser, 2002 p.1). In this way Holstein and Gubrium's 'active interview' combined useful aspects of the interview as they put it 'the subject behind the respondent not only holds facts and details of experience, but, in the very process of offering them up for response, constructively adds to, takes away from, and transforms the facts and details' (Holstein and Gubrium, 1997, p.117). Therefore I suggest there was great value to the various types of interview in this study enabling a detailed analysis of the perceived elements for a successful transition.

Combining data in educational research

The main aim of this research was to investigate the effectiveness of transitional intervention strategies among year 12 adolescents studying 'A' level psychology and ethics for the first time. In posing the research question 'What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?' the need to attempt to answer the question called for combination of data sets.

In doing so the study embraced 'what works' rather than a 'promised land' (Tashakkori and Teddlie, 1998, p. 11 and 12) and therefore this study combined a number of quantitative and qualitative methods underpinned by social constructivism as the paradigm. The flow chart in Figure 9 will remind the reader of this process.

The value of collecting quantitative data on students' academic self-concept was of interest. To illustrate, academic self-concept is regarded as very important in any learning situation. According to research, (Marsh, 1996) a positive self- concept is said to have a positive effect on academic achievement and also in reverse, the less positive you regard yourself, the less positively you regard academic behaviours which lead to lesser academic achievement. However numerical analysis alone created very little holistic understanding. The 'convergent parallel design' as suggested by (Cresswell and Clark, 2011 p. 77) was used to triangulate methods by directly comparing and merging both qualitative and quantitative data.

Quantitative instruments

The quantitative instruments used in this study are discussed in depth within this chapter and are introduced here:

- SDQ (III) a validated instrument used within psychology to measure a student's self-concept. Discussed later in this chapter, a shortened version was used with 40 questions.

- I developed an interview frame which contained ten quantitative questions regarding academic confidence (AC), academic effort (AE) and academic achievement (AA), the responses of the interviewees were collated and triangulated with their qualitative responses.

- Integral to the interview frame a further quantitative section was designed for students to self-assess. At this stage in the interview frame (see Appendix as Figure 59) students were asked to generate 5 'word cards' in response to 2 questions. These 'word cards' were sealed into an envelope and signed and dated by the student. These words were numerically coded to analyse students' responses to the two questions:

  - Describe how the study session has affected your knowledge and understanding of psychology

  - How do you feel about your study sessions?

I would now like to state the aim and the research question.

Research Objectives

Aim

The aim of this study is to investigate the effectiveness of transitional intervention strategies among year 12 adolescents studying 'A' level psychology and ethics.

Main research question

What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?

Subsidiary research questions

SRQ_1.   Is there a difference in the academic self-concept of adolescents who use collaborative learning strategies and those who use autonomous learning strategies?

SRQ_2.   Is there a positive correlation between academic self-concept and academic achievement?

Methodological credibility

Social constructivist research is not committed to one methodology especially within an educational lens. It insists upon the importance of social meaning and is a philosophy that embraces mixed methodology. I suggest a research process that draws upon the benefits from both quantitative and qualitative approaches as well as incorporating the practicalities of real life situations endeavours to be trustworthy. The choice of methodology is orientated around 'what works' rather than the use of a specific method because it belongs to a certain paradigm. This 'what works' is central to the notion of pragmatism.

Fundamental to a pragmatic research approach is the belief that a chosen research method should follow the research questions in a way that 'offers the best chance to find useful answers' as it attempts 'to fit together the insights provided by qualitative and quantitative research into a workable solution' (Johnson and Onwuegbuzie, 2004, p.16 and 18) and regard it as a 'research paradigm whose time has come'.

In this way, I adopted a methodology that embraces a democratisation of the research relationship putting the 'researcher and the researched in a new relation to each other' (Burr, 2003, p.155). Here the aim was to hold both views as equally valid, where 'reflexivity' is revered highly. Putting reflexivity, validity and usefulness at the heart of the study, led me to generate the understanding from the tools at hand rather than 'passively receiving the 'correct', universally accepted methodologies' (Kincheloe and Berry, 2004, p. 2).

Favouring the flexibility of methodologies, Bryman (2008) agreed and suggested there was a growing preparedness to think of research methods as techniques of data collection not 'encumbered by epistemological and ontological baggage as it is sometimes supposed' (Bryman, 2008, p. 624). However despite their flexibility and fashionable triangulation Bryman (2008) cautioned mixed methods should not be used as a cure all to enhance the credibility of the publication. The reasons for mixed methods in this study were to generate a deeper understanding of the learners' journey to increase as Weber (1947, p. 88) referred to it in German, as Verstehen' or 'understanding' 'explaining the lives in the shoes of the post-16 learner.

Weber (1947) argued for the study of social action through interpretive means, based on understanding the purpose and meaning that individuals attach to their own actions. Promoting the benefit of qualitative methods, Weber proposed interviewing individuals and smaller groups might be the key to better understanding sub-cultural meanings within a culture. His concept of 'Verstehen' was central to social constructivist and qualitative research and referred to describing people in their own words, experiencing empathy with their real experiences in every day life and from their own perspectives. Verstehen in this study extends to the value of interpreting student culture to offer a realistic picture of student's lives.

The 'Verstehen' in this study referred to the ability for students' narratives to be understood, their lived experiences of their study sessions to be correctly scrutinised, which obviously occur in a cultural and historical perspective. (i.e. each study session may vary too). 'The meaning students attach to their actions is a 'kind of measuring stick that captures the most rational and essential

components of any social thing' (Social Theory rewired, 2011). Verstehen allowed a look into the student's perspective on why he/she found the study sessions 'goodish' and 'rosy' and how the study sessions had affected his/her study sessions since. It also enabled the student journey to be fully explained 'in their shoes' as one student, 'P7' revealed it wasn't until 14 months into sixth form 'she knew what really worked for her and how to study best'.

To reiterate, this investigation opted to merge methodologies, as Cresswell *et al.,* (2011) referred to it, 'concurrent triangulation strategy' or 'convergence design'. Bryman (2001) implied that 'the results of an investigation using a method associated with one research strategy are cross checked against the results of using a method associated with the other research strategy' (Bryman 2001, p. 447). I assert here that educational research, unlike traditional experimental psychological research, can benefit from a combination of quantitative and qualitative methods, allowing the subtleties of a phenomenon to be coupled with empirical validation, revealing the strength of relationships and differences and allowing their interpretation. (The reader may reference the flow charts in Figure 9 and Figure 10)

As Tew *et al.*, (2004) suggested where the researcher is required to liaise between different levels of audience the philosophical criterion for selecting a certain approach needed to be transparent. This methodological element of credibility was important too. The findings were disseminated to the academic community, colleagues within education, students, and parents, therefore a holistic multi-dimensional philosophy underpinning data collection was more appropriate. This 'completeness' as Bryman (2008, p. 609) discussed where no methodological gaps are left unfilled, is often easier for audiences to reflect on.

This study aimed for a comprehensive understanding of the transition period for post-16 learners and I think the combination of qualitative and quantitative research methods in a mixed method design, enhanced the credibility of the findings (Bryman, 2006).

The educational community is bombarded by broad brush stroke 'hard' quantitative evidence, and some practitioners within teaching and academia have developed a cynicism about the value of constant statistics ((National College, 2012), Poirier (1992)). Thus the methodological credibility of the study's findings are paramount. Each method used in this study was designed to capture a specific experience. Merging, mixing and interpreting data allowed a holistic view of a transitioning student.

Design

Crotty (1998) suggested any design is informed by four elements; epistemological, theoretical, methodological and techniques. These interrelated elements affect the choice of design and decision to provide a comprehensive analysis of the research problem. The design dovetailed differing strengths of both quantitative and qualitative measures, working with what works as Johnson and Onwuegbuzie (2004) promoted.

The design process (illustrated in Figure 10) showed the twelve-month quantitative and qualitative measures converging to provide meaning to academic self-concept and the chosen study skill context. This mixed methodology or 'convergent parallel design' as explained by Cresswell and

Clark (2011) showed quantitative **(blue)** and qualitative **(green)** weighted equally, combined in one design.

The longitudinal nature of this twelve-month process allowed a valuable insight into the learners' journeys, combining valuable qualitative methods of semi-structured interviews for example which provided, as Silverman (2011) suggested, a 'dispassionate, passive instrument for obtaining information where interviewers provide pertinent answers' (p. 149). In order to gain credible and plausible findings this particular investigation benefitted from a clear vision from the outset as to how, and to whom, the results were disseminated.

The interested parties who may benefit from this study require comprehensive, accurate and accessible findings. Often psychologists and educationalists use the term 'validity' in order to explain the genuine nature of the findings. However because of the association of this term with the quantitative nature of the research process, qualitative researchers have preferered the term 'trustworthiness'. As a result of mixed methods sitting in the 'third chair' (between qualitative and quantiative mesures) concurrent, parallel and sequential measures are required (Tashakkori and Teddlie, 2003) in order to synthesise and integrate mixed method data. With this in mind, Johnson and Onwuegbuzie (2006) promoted the use of the term 'legitimation' instead of the term 'validity'. Legitimation is a process that is 'analytical, social, aesthetic, emic, etic, political and ethical and which must involve a community of qualitative and quantitative researchers committed to addressing the multiple problems of mixed methods research.' (Johnson and Onwuegbuzie, 2006, p. 60). The combination of methods aimed to elucidate this 'legitimation' in a convergent design.
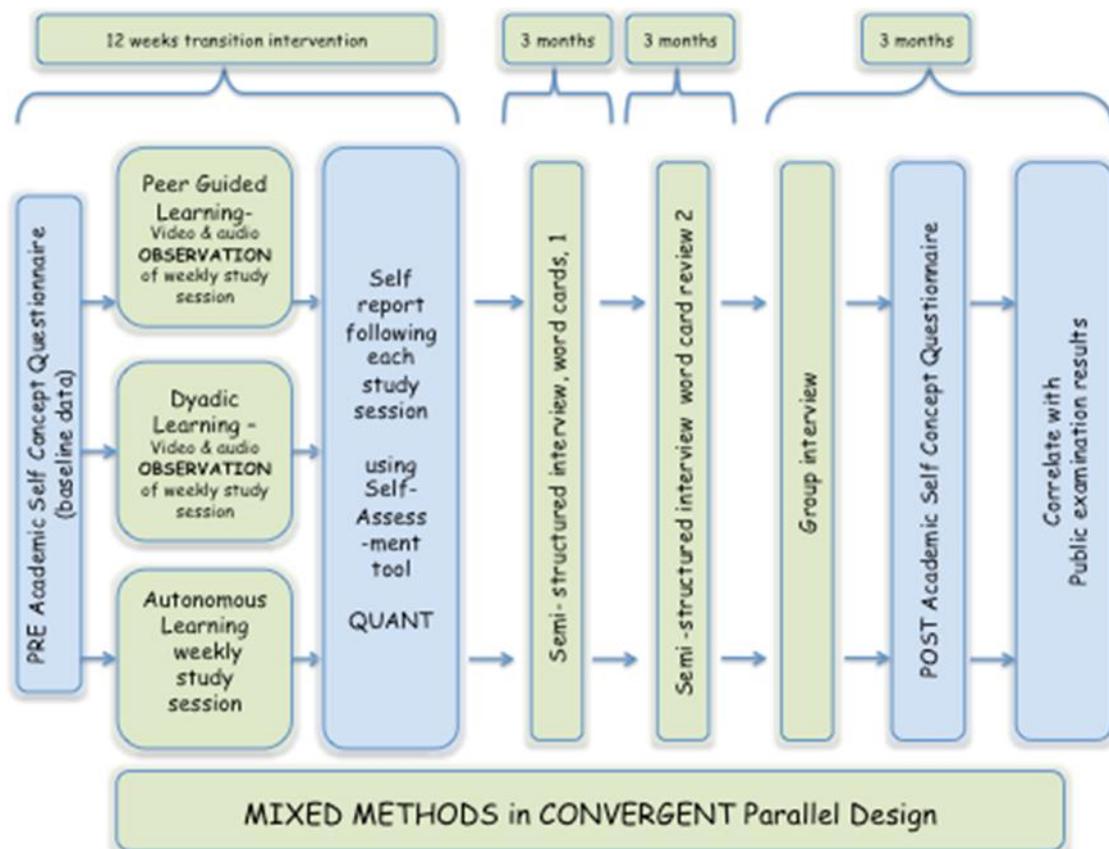
Figure 10 Convergent parallel design

Denzin and Lincoln (2000) promoted the complex natured, multi-layering analysis of mixed methodologies in their 'bricolage' in order to provide a fluid and meaningful depth to a study. Despite the benefits of an eclectic layering, mixed methods designs are not a panacea for the weaknesses of quantitative and qualitative designs. Bryman *et al.*, (2007) suggested the designs and methods may benefit from triangulation and complementarity but may provide a better understanding than if just one method had been used and still be subject to the same academic and statistical scrutiny and rigour as when one method or design is used. In this investigation the complementarity was key. Thus each method was carefully selected and used to validate the findings from other selected methods, and vice verca.

Pilot

Social science researchers conduct pilot studies so that their findings and their methods are considered reliable and are these a crucial element to good study design (van Teijlingen and Hundley, 2001). Pilot studies can offer a valuable insight before beginning the full study.

The main purpose of this pilot study was to investigate whether the video process had been designed in a manner that would elicit the required information. The room chosen with video camera equipment was trialled in order to assess sound quality, recording logistics and the functionality of remote on / off sensors. A round table with six chairs was set up with exclusive access for this study, booked and monitored by me for the duration of 12 months. Stationery, relevant textbooks and 'self-assessment tools' (see Page 154) were stored in the room in order to create a study environment. Wi-Fi access was trialled. The design was to have the camera triggered by movement of students entering the room. This was really successful until week 9 when the motion detection failed and the booking and setting of the camera had to be switched on by the technician in the adjoining room.

Similarly a short pilot of the interview frame was also trialled prior to initialising the interviews as ambiguities in phrasing the questions, seating, inappropriate response categories and redundant questions could be filtered out. The questions were trialled to check that the laptop transcript software was functional and the interview questions were pitched at the appropriate level of complexity to ensure a clear understanding of academic self-concept.

Following guidance from Kezar (2000) the pilot study investigated the usefulness of the proposed self-evaluation tool. Appendix Figure 55 catalogues the piloted self-evaluation tool. Here I trialled the idea of a self-evaluation using a Likert scale and an assessment of being 'on' or 'off' task. The definitions and quantification of 'on' or 'off' task behaviours used in the literature were not convincing (Brock, 2005) within this social constructivist methodology.

Operationalising 'on' or 'off' task proved to be unsatisfactory and subject to higher levels of ambiguity than originally expected. As a result of this pilot of the Likert scale a focus group was established to help to design a set of words that would allow a quantification of how effective the study session was for the students. In order for the reader to understand clearly how the self-assessment tool was designed see Table 14 on page 154 where a detailed section clarifies the tool design.

Deciding on a learning context

In a pre (week one) and post (at the end of the 'AS' course) measures design three independent contexts were analysed:

Learning Context 1 represented peer-guided learning (PGL),

Learning Context 2 represented dyadic learning (DL),

Learning Context 3 represented autonomous learning (AL).

All psychology and ethics studentsin both colleges during induction week were given an induction talk and questionnaires on learning preferences, attitudes to study, styles and an opportunity to reflect on how they revised for their recent GCSE examinations. This was integral to their academic introduction to their subject. All students entering year 12 self-selected their preferred study session type and agreed to one hour per week specifically for their subject. The students selected their choice based on their past experiences of learning and it was suggested to them both in the induction weeks as well as in the induction talks that they make a carefully informed choice.

During induction week at both colleges, students were invited to an evening presentation to help them make an informed decision. Organised on separate evenings in line with college calendars, students experienced all three conditions (see Appendix 64). With and without their parents in attendance, the aim of the evening was to help students make an informed choice of which strategy might best suit their learning preferences. Each context was clearly explained. A small video vignette was prepared for each session in a multi-media presentation. In these vignettes the peer-guides introduced themselves and spoke a little about what 'A' level study meant for them, and how they

preferred to learn, and whether they thought 'A' level psychology was difficult. This was designed so that students could assess each context equally. The editorial control was given to the students in order not to present a 'teacher-style' video. Despite the absence of formal guidelines, students were aware of what was acceptable and what was deemed to be unprofessional. The benefit of a video-preview was confirmed in recent research, which supported the premise if students could preview a small video of their lecturers they were more likely to make an informed decision and provide the 'best fit for effective learning' (Gross *et al.*, 2015).

Some students were already friends, perceivably knew each other well enough to make a decision to learn together, and chose to study in a dyad. Those students who were new to the colleges made their assessment on their own preferences of GCSE revision and also took into consideration results of questionnaires on learning preference, styles and attitudes that had been covered in induction. Those with similar attitudes and preferences aimed to work together either as a dyad, alone or in a peer guided session. Furthermore those students who had not yet made any friendships were encouraged to look for someone in their class who was 'approachable' with perhaps a 'similar timetable' or 'learning preference'.

Students from the present upper sixth at each college attended the meeting and acted as reference points for students at this stage. To paraphrase a typical conversation between an upper sixth student and a new to college student: 'I didn't know [name] when I came to this college, and now since we are in the same class and share the same free periods together we thought we would give

it a go… and we have never really looked back… why not try it you have nothing to loose.'

Summary of design

Students chose their learning context for their study sessions. They all agreed this study session would be once a week for the first twelve weeks of their sixth form experience. A longitudinal methodology was established to increase the reflexivity of the findings.

The image on the following page represents a schematic of the 'design' taken from my presentation to the British Psychological Society (Bone, 2015). It shows the variety of methods and is an illustrative schematic of the design.

At this point it is important to note that none of these post-16 students had experienced 'free' or 'study' periods within their timetable before. Their timetables at GCSE were full days and without written permission from their parents they could not leave their allotted timetabled classes. Despite assembly information and reiteration by their personal tutors, students still found the concept and nature of free or study periods ambiguous.
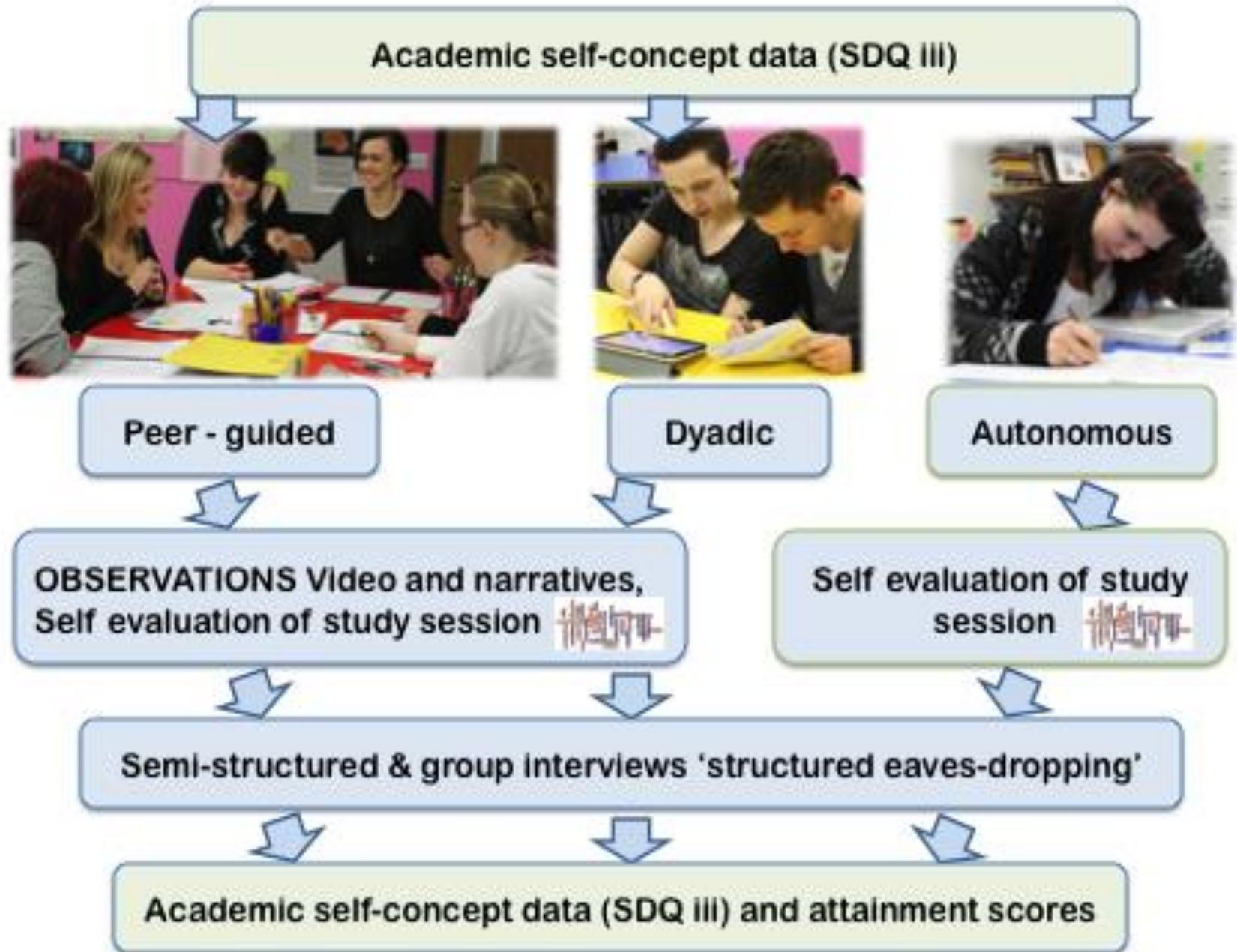
Figure 11 Presentation schematic of study design BPS Conference 2015

Sampling

In this study non-probability opportunistic sampling was used to select the research sample. This type of sampling is used when a sample is chosen based on the participants being accessible to the researcher. 73 students represented 55 students from the college/academy where I was employed as a teacher (16 male and 39 female) referred to as College 'A' and 18 students from a similar local college/academy where a colleague was employed, totalling (4 male and 14 female) referred to as College 'B'. Students at College 'B' were not known to me. This opportunistic sample of 20 male and 53 female (n=73) 'AS' students i.e.; their first year of 'A' level study, were all students who were beginning their sixth form studies at two North East of England academies.

The colleges/ academies were similar in terms of ethos and attainment. All participants had achieved 5 A*-C grades at GCSE and were enrolled onto 'AS' psychology and ethics courses. No students had studied at this advanced level of education before and all were attending the courses in order to gain an external qualification in psychology and ethics.

The contexts of peer-guided learning, dyadic learning or autonomous learning (PGL, DL, and AL) were populated through self-selection and own choice. The distribution of the sample is presented in the following Table 12. As illustrated the groups were not equal as the students chose their own method of studying and were not influenced by the researcher.

Autonomous Learners	Dyadic Learners	Peer Guided Learners	Total
N = 26	N= 29	N = 18	73
35.6%	39.7%	24.6%	100

Table 12 The distribution of the sample across learning contexts

Convenience or opportunistic sampling is where members of the target population, as Dörnyei and Csizér (2012) mentioned, are selected for the purpose of the study if they meet certain practical criteria such as geographical proximity, availability at a certain time or easy accessibility. Dörnyei further explained that 'captive audiences' such as students in the researchers own institution are prime examples; 'To be fair, convenience samples are rarely completely convenience-based but are usually partially purposeful, which means that besides the relative ease of accessibility, participants also have to possess certain key characteristics that are related to the purpose of the investigation' (Dörnyei and Csizér, 2012, p. 81).

Every researcher weighs up the advantages and disadvantages of a chosen method of sampling. Initial plans for this investigation included a number of other schools in the locality increasing the numbers of participants. However due to lack of time and availability of teachers the actual sample consisted of only two schools hence the numbers of participants was small (n=73). Despite the small sample, as a budding researcher collating the data and attaining a respectful level of objectivity, 73 participants allowed a generous insight into students' lives transitioning into 'A' level study.

The student sample from both colleges represented a variety of social economic status (SES) groups indicated by their Fischer Family Trust (FFT) data. In this study I refer to FFT, a charitable organisation, which currently provides 100% of Local Authorities in England and Wales with data to support target setting and student self-evaluation for schools. The calculation of FFT was based on how students have already performed in external examinations and provides estimates of how similar students might do in the future. All students vary widely in their social backgrounds. Albeit both colleges had some element of matching in that they were both catholic colleges that had recently converted to academies in the North East. The fact that the sample consisted of a variety of students (i.e. not all of an identical SES) could have strengthened the potential usefulness and resonance for other students and colleges (Sandelowksi, 1986). The students' ALIS (Advanced Level Information System) scores were used as a prediction of their academic success, which is a standard procedure in education today.

Students who had volunteered and selected as 'peer guides' for the peer-guided learning context in college 'A' received training delivered and designed by me (see Appendix Figure 62). Peer guides selected my colleague at college 'B' received the same training, delivered by my colleague. Seven guides in college 'A' and four guides in college 'B' volunteered and completed the training. They were not all required.

Non-probability sampling such as opportunistic samples or often phrased as 'convenience sampling' (Bryman, 2001, p. 97) have been criticised for their distinct features and for their lack of reliability and generalisability to larger target populations. However I suggest sample size is incorrectly thought to

correlate with generalisation. The quality of any generalisations is not restricted to any 'particular sample size nor to a specific research paradigm' (Symonds and Gorard, 2008, p. 7) as this assumes the incorrect notion that all samples of sixth-formers are stable and fixed!

However despite these evaluative points this sampling technique was not without its usefulness. To illustrate this point I offer an example; the focus group conducted as part of the pilot-study in college 'A', was designed to generate words for the self-assessment tool (Figure 15). The members of the focus group were students and teachers who were all familiar with the issue of independent learning. In this way the convenience of having access to such knowledge was without question enormously relevant to the study as argued by Pring (2000) who suggested those who are practising education are those who best understand the process. When the students used the self-evaluation tool (Figure 15), it was explained to them that the words were generated by a focus group of their peers. This increased the validity, trustworthiness and resonance for the students.

The initial sample size was larger, however as a result of their absence or leaving the colleges, there were a number of students whose data was not included. These students could not be followed up as they did not sit the examination or left the college without a forwarding contact. (These students totalled 4). Informal connections were established with 3 students via email who gave their reasons for leaving college as geographical i.e.; ease of accessibility to bus routes (2 students) and friendship (1 student). The remaining student failed to respond to contact attempts.

Further opportunities for analysis

It was decided in the pilot phase not to investigate potential gender differences in choice of study style as well as in changes in academic self-concept. Recent pilot study evidence from Bowles and Hattie (2015) found females taken from a variety of age groups prefer support from their peers. This in retrospect would have been interesting, albeit difficult, with unrepresentative sample sizes. The potential opportunity to investigate the differences between the two sites and the two populations of students was also considered but then rejected. The rationale underpinning these seemingly missed opportunities to generate data was to ensure the study was as clear and simple as possible. The differences in gender and academic self-concept have been clearly documented (Marsh and Yeung 1998). Wylie (1979) as well as Hattie (1992) reported the majority of studies investigating gender differences in self-concept lead to the 'strong conclusion that sex of subject is not an important moderator when using self-concept scales' (Hattie, 1992, p.180). In the same way the sample populations of the two sites were such unequal groups, that an analysis of gender difference would be marginal. College 'A' consisted of 55 students (16 male, 39 female) and college 'B' consisted of 18 students (4 male, 14 female) as shown in Table 13 below.

	College A		College B		Total
AL	4 male	7 female	4 male	2 female	26
DL	8 male	12 female	0 male	12 female	29
PGL	4 male	20 female	0 male	0 female	18
	55		18		73

Table 13 Gender difference in choice of context across colleges

A further opportunity for an enhanced study (discussed later in future research ideas) would have been to track and analyse the differences in methods used in college and in other environments and its resultant effect on academic self-concept. For instance no students in college 'B' opted for a PGL session, but may have organised such a group independently or spent hours studying alone as a result of a dyadic study sssion at college. This could have been studied by asking students about their additional learning. A 'mixed-learning' method could have been the basis for in depth analysis.

Ethical considerations

Before embarking on discussion of the methods used in this study I suggest to the reader this is a good place to explore my role as a teacher and as a researcher in relation to the students involved in the study. The ethics that underpinned and drove the journey need to be exposed to critical consideration; as Cambell, Freedman, Boulter, and Kirkwood suggested '…by their very nature, social science research and educational research involve studying people's activities in one way or another. The researcher must take responsibility for the wellbeing of those who participate in the research s/he conducts' (Cambell *et al.,* 2003, p. 5).

An honest ethical stance was of great importance to me not only as a chartered psychologist governed by the regularly updated British Psychological Society (BPS) code of ethics, the Northumbria university ethics and governance guidelines but as a philosophical underpinning too. The ethical stance determined how researchers conduct themselves and treat the participants throughout the study. This did not just mean during the initial process of gaining

access to the participants but included the whole data collection process, analyses of data, final reporting of it in the written form and most importantly the attitudes and behaviour of the researcher to the participants throughout the study. Arden recently reminded post-graduate students of the crucial relevance of ethical integrity when she reflected the important components were continued accountability, honesty, professional courtesy and good stewardship. (Arden, 2015)

In 2003 BERA (British Educational Research Association) produced ethical guidance for educational researchers, which is also regularly updated (Jones, 2011). This guidance was very useful. It was important participants were protected and there were rigorous systems in place. However it was really important not to lose sight of what the researcher intended to do with the participants and how they interacted with them. This was based on notions of fairness, respect, dignity, democracy and equality. The systems in all universities have been refined over the years and are now more in line with the medical model of ethical approval. Whether this model is actually fit for purpose for educational research and particularly research using qualitative approaches is beyond the remit of this study to decide.

Pring (2000) argued that too often 'morals' and 'ethics' are confused and it is possible to have an ethical stance but this has to be underpinned by the 'moral thinking' of the researcher. As he put it, 'there is a constant need to reflect on the values which form the research, and the ways in which those values might be made concrete in the research activity itself' (Pring, 2000, p. 140).

The ethical principles not only have to support and underpin the research, they have to be consistent with the type and nature of the research. In this way, ethics and integrity were at the heart of the study. Ethical research was the foundation for understanding how the study was designed, the methods used, and the philosophical methodology. In other words the 'moral behaviour' of the researcher defined the key principles guiding the conduct of the researcher through the study. Therefore a continuous discussion of, and negotiation about, the way the research is proceeding, changing or staying the same is vital. From this approach 'real informed consent' can be maintained. It is naïve to think that from the outset it was possible to foresee all that might occur and it was important the initial principles and rules were reviewed with the participants. To illustrate this point there were some on-going considerations. These were;

a) The participants' right to withdraw,

b) confidentiality and anonymity,

c) interviewer effects,

d) ethical procedures.

a) The participants' right to withdraw

A guiding principle of the study was the participant's right to withdraw. If students did not want their data to be used or did not wish to continue to take part then the researcher must be comfortable with this. As I taught most of the students, they felt perhaps they needed to continue with the study sessions so as to please me or because they knew that the study I was conducting was important. From the outset of the study, I made it clear to all of my students what my research position was.

Prior to beginning the study, full student, parental, and college informed consent was sought, as confidential data was used in part of the investigation. (See Appendices 52, 53 and 54 for full details of the ethics protocol). Further ethical issues are discussed at length within this methodology chapter.

This was evident on all of the questionnaires, consent forms, invitations and letters. Having this information heading all of the appropriate forms for the students to complete was important and necessary. However for me the right to withdraw and full and real informed consent was more than that.

I reflected in my field diary on Friday 21st Sept, 2012 the frustration of having to 'chase up' students' timetable changes with senior timetabling 'so that one student (college 'A') could attend a study session that was more convenient for her'. I used my field diary as a source of data in this way so that I could reflect on the teacher / researcher role. With this in mind, I was careful not to overstep the boundaries of teacher and researcher. This meant of course that if I helped her to change her timetable to suit her it would also benefit my study, as I would

be able to retain a student who may potentially have dropped out. I had noted in this comment, that if I were 'a researcher only and not in a dual role this probably would not have occurred'**.**

In a similar way I was notified by one of the peer guidesin college 'A' on Tuesday 2nd October, 2012 that 'two students wanted to leave their study group for some reason'. Again frustration was evident in my annotations, however as an ethical researcher the participants were able to do as they wanted without any restraint or 'teacher manipulation.'

b) Confidentiality and anonymity

Some students were adamant that their names should appear as real names rather than synonyms although most students were not really concerned about being identified. Despite these different viewpoints it was important for me as a role model to my students and as an ethical researcher to behave in an ethical manner adhering to the code of conduct for psychologists. It was therefore important that I assigned all of the participants with a number and as they submitted the completed study session evaluations they identified themselves with only a number, and througout, this research ll participants are referred to exclusively by their participant number.

Similarly when conducting one to one interviews in the second phase of the study I referred to students as 'P1', indicating participant 1 so that their identity can be held confidential. This meant that anyone familiar with the study or students could not identify participants. Although some students wanted their opinions to be individually recognised and were often adamant, an ethical

agreement was reached with all participants that all names would be anonymised by using numbers. The British Psychological Society's code of ethics research reports clearly that participants in psychological research have a right to expect that information they provide will be treated confidentially and, if published, will not be identifiable as theirs. Despite this Grinyer (2002) reported some participants are eager that their names should and must be published (Grinyer, 2002) to share their experiences with others.

c) Interviewer effects

As a teacher, I feel passionate about ensuring all students are entitled to access regular and good quality teaching and learning. It became clear that because of this enthusiasm, at times I was not as open as I should be to what was occurring in front of me. I had to work hard to ensure my own assumptions and 'values' did not get in the way. Listening accurately to the students was important, in particular writing and recording a word-for-word account was essential. This was particularly evident in the interviews with students at college 'A'. Here students were open and honest with me in their responses as far as I could tell. As their psychology teacher, questioning them using the interview frame created a power relationship that I was not always completely aware of. I was after all their teacher and as a result they were unlikely to report that they did very little work in the study sessions and neither were they likely to report a complete lack of interest for the subject of psychology.

Gramsci (1971) points out in his prison notebooks that such positions of trust often have a kind of creeping hegemony about them that we as researchers are not always completely aware of. This relationship was of concern ethically and

was never really resolved. On the plus side, one of the benefits of knowing the students (and them knowing me) was that the students felt at ease reasonably quickly, enjoyed the experience of reflecting on their learning and transition despite some social desirability bias.

Reflecting on the interviews and the students' responses, they may not have been entirely open with their 'truths' due to the relationship of student/teacher. It was really important to me that the research was conducted in an ethical way and was therefore imperative that as a researcher I did not lose sight of how I should interact with the students who were trying their best to be open, honest and frank. I noted in my field diary how I should conduct my interview and be aware of my body language, be conscious of my responses, in order to minimise my effect upon the interviewee, the interviews I conducted at college 'A' were carried out with dignity, and rigorous respect.

d) Ethical procedures

The checking and rigour of university ethics and governance systems are put in place to ensure that researchers adhere to ethical principles at all times and were followed as a matter of course. My ethical procedures were passed as part of my proposal and checked again at my mid-point progression. On several occasions during supervisory sessions we discussed the power relationship that existed between me and the students. This was part of the continual ethical considerations where my role as a researcher overlapped with my role as their teacher.

Students and teachers are not equals and thus a difference in power exists in their relationship. At times it was very difficult for students to respond to me as a researcher and not as their teacher. I was therefore very careful to conduct myself as a researcher with the uppermost dignity and respect. Furthermore all of the participants agreed to be in this study and were given the right to withdraw at any time. They were all post-16 students, volunteers and free to leave at any point and were reminded of this.

Notes in my field diary 29th Sept, 2012 revealed the logistical paper work for ethical procedures were time consuming. With a full time-table of teaching as well as other school commitments, organisation of the induction evening, and ensuring all of the signed consent forms were collated, signed dated and recorded could actually have warranted a bit of extra help. Presenting to the governors, speaking to the senior leadership team of both colleges as well as ensuring all students were given all of the appropriate choices, guidance and attention demanded a great deal of logistical skill. I am confident that in gathering the data in this study, the highest ethical guidelines have been followed and, as Pring (2004) argued, I think I have succeeded in 'living my ethical principles'.

Methods

Developing the self-assessment tool

A focus group in college 'A' was established in June 2011 to generate views and ideas that they 'deemed important for what a study session meant for the students'. The results of this group informed how students self-assessed their sessions. This focus group method contained important components: members were selected because they were knowledgeable about being a student, and the benefits and drawbacks of study sessions. As Merton *et al.*, (1956) stated, 'because they are known to have been involved in a particular situation' (p. 3).

Fourteen participants of the focus group in college 'A' (5 teachers, 3 year 13 students and 6 year 12 students) accepted an invitation to participate. Together they generated a series of words that reflected perceptions of an effective study session. The focus group recruitment from 45 invites sent via email received a response rate of 31%, so it was decided to enlist all 14 willing volunteers. Hennink *et al.*, (2011) suggested typically between six and eight participants would be the optimum, however I decided that more participants would generate a larger range of responses. This larger group did generate a broad range of opinions and ideas despite the participants originating from such divergent groups. Students in this college seldom had an opportunity to share ideas with senior teachers and teachers as equals and they seemed to relish the experience. They all received a small gift for their efforts and said they were grateful to have made some contributions.

One year 13 student was the 'moderator' and one of the senior teachers was the 'note-taker' (Bryman, 2008). Becoming to their roles, they arrived at a consensus of adjectives and adverbs defining 'what an effective study session

constituted'. Through active conversation the focus group generated this series of words below, they were not isolated individuals but engaged and reflective. The members of the group defined the criteria such as 'effective' and 'study session' and this active process was reflective and genuine. I was present to welcome the participants and initiate the session but not present during the proceedings. I made no recordings and the fourteen members of the focus group were left alone to their discussions.

The focus group generated a total of twenty-five words, five words within each category varying on a Likert type scale from effective to highly ineffective. All members of the group came to an agreement on the words and their position within the given Likert type scale parameters within a double lesson (1.50 hours). No words were changed (i.e. not hyphenated and no categories were shifted.) Table 14 illustrates the words generated to measure the effectiveness of students' study session after the fourteen members were given the task of: 'What does an effective study session constitute?'

For several reasons, notwithstanding demand characteristics, the twenty-five words were then presented as a randomised list. As students used these lists to monitor their levels of engagement after every study session, I created a randomised Tag cloud, which was more attractive and engaging than a table format. A commonly known Tag cloud 'Wordle'© was used to generate the following image as seen in Figure 15. Students were familiar with this software in college for various presentations, and when I consulted the six 'AS' students from the focus group in college'A', it was the general consensus, that if given a preference, students thought the 'Wordle' 'was better than a normal list'.

Group 1	Group 2	Group 3	Group 4	Group 5
Very effective		Acceptable level of effectiveness		Very Ineffective
Effective	Helpful	Allright	Ineffective	Futile
Positive	Valuable	Average	Weak	Useless
Fabulous	Practical	Goodish	Tame	Timewasting
Rewarding	Fruitful	Satisfactory	Indifferent	Worthless
Competent	Useful	Okay	Mediocre	Pointless
Productive	Rosy	Ok	Fine	Silly

Table 14 Words chosen by the focus group to measure the effectiveness of study sessions.

Figure 15 25 words generating a 'Wordle' tag cloud

As MacNaughten and Myers (2004) suggested, focus groups allowed the basis of data analysis to be 'mapped'. Using this kind of data to 'map the woods' allowing ideas and structures from a potentially unknown terrain to be drawn up. Silverman (2007) agreed with MacNaughten and Myers (2004) but suggested that a detailed analysis would be more like 'chopping up the trees' than 'mapping the woods' (Silverman, 2007, p. 63) and in this way the reflective generation of the twenty-five words was deemed acceptable coding. The self-assessment tool (Figure 15) was emailed to all 14 focus group members, all of whom (surprisingly) replied to say it was acceptable and matched what they had agreed or envisaged. Thus the student self-assessment tool emerged as an instrument.

Using video data to understand the students

Students in college 'A' were observed during a 'naturalistic setting' (a study room, designed by me, with video and sound). Here I refer to a naturalistic setting as an environment that is recognised and accepted by the students for what it is but not necessarily 'part of their normal experience' (Newby, 2010, p. 363).

Behaviours that were labelled (see page159) were talking and discussing homework tasks, organising learning resources, quizzing and discussing topics covered in lessons, making revision resources and completing assessments (ie a variety of tasks).

Students in college 'A' had organised a booking at a prearranged time, which they knew was being recorded at a certain time. Unfortunately some footage of

an empty room was captured. I looked carefully at many characteristics of the video observation, small clues such as brief eye contact, long silences, one student watching another student for 14 minutes while the other worked on her poster and even 26 minutes of joke telling have been used in this study.

In college 'B' for space and logistical reasons it was not possible to collate video evidence of the 12 dyadic learners. There were no students who chose to learn via a peer-guided method despite induction training.

Video observation (where I did not participate but the students were aware of who was recording and assessing their behaviour), Newby (2010) coined as 'inactive and known'. This captured a unique circumstance, exactly what went on where the emphasis on the lived experiences of the transitioning students with a purpose of understanding the world through their eyes.

Many studies have looked at groups video-taped whilst engaging in problem based learning tasks and their analyses have supported interventions for deep level learning in student groups (Visschers-Pleijers *et al.,* 2006). Using similar methodologies where, for example, students who posed lots of verification questions in fact showed their lack of preparation and learning, (Yew and Schmidt, 2007) supported the emerging frame for analysis.

Silverman (2007) suggested that silence, photos, one word utterances, music, books and even jokes are of great interest. Video evidence of real world situations has the potential to yield interesting data. To suggest there are remarkable things to see in mundane situations is the reason why all of the dyadic and guided study sessions were filmed. Borrowed from ethnography and

sociology the plausibility of video evidence has been embraced in this mixed methods study.

Heath, Hindmarsh and Luff (2010) suggested that in recent years the increasing emergence of video analysis of social interactions has generated significant insights into a broad range of social activities. These analyses of language, behaviour and talk have powerfully demonstrated (through visible and spoken formats) complex human behaviours, and are now seen as a valuable and critical resource. Both Heath (2011) and Sacks *et al.*, (1974) suggested that alongside the academic contributions of video data the growing commitment of such a resource, using only gestures for example, can inform and improve communication in groups. This research approach borrowed from ethno-methodological interpretive sociology and symbolic interactionism (Mead 1935). Cooley (1912) enabled visible conduct such as movements, actions, talk and gestures to be scrutinised and analysed. Garfinkel (1967) who developed social interactionism as an offshoot of symbolic interactionism, and thinkers such as Blumer (1969), himself a social constructionist, stressed the importance of noting and evaluating meaning in human communication and language. They both proposed watching and analysing human interactions was a meaningful methodology. Any types of behaviours they suggested, no matter how repetitive, were never identical and were valuable in the meaning they created and conveyed. For example the meaning of 'hmmm', 'mmm', 'okay, 'eh?' and 'huh, yeh that's it' are all differentiated by their context. Similarly the long periods of silence or periods of joke telling and procrastination, as well as heated debates about what a certain key study found were hugely relevant and valid to the study experience of the transitioning student.

Social interactionists recognised that these methodologies are steeped in context-dependent meaning; this is their ultimate strength. They argued without the 'Verstehen' all analysis of social human behaviour was meaningless. Hennink *et al.*, (2011) for example, embraced the value and relevance of qualitative research to the extent that they subtitled their book 'Qualitative research humanises science' (p. 0). Hence the attempt here was to understand the students' behaviours rather than attempt to coldly quantify their 'on and off task' behaviours. Studies of naturally occurring talk, especially in ethnomethodology, have informed conversation and gestural studies. Silverman (2011) referred to studies in the world of the auctioneer for example where gestures and speech have intrinsically relevant meanings. Goffman (1981) suggested a series of actions, gestures and narratives created enough resources to examine social interactions.

Following Silverman's (2011) suggestions of how thematic analysis should be completed, the analysis of video data was analysed to generate meaningful interview questions. The coding of the behaviours was ascertained via trial runs of videoed study sessions and once categorised this informed initial labels identified in Table 16. The comments, behaviours and recurring themes were analysed from seventy-two hours of filming.

Observed activity	Assigned Code	Examples:
Procrastination activity	**P**	Activity: Texting, doodling, sorting file out, staring into space, picking fingers, looking out of window…(informed by Gingerich and Lineweaver, 2014)
Off task **C**hat	**O / C**	Voicing issues regarding friends, teachers, and parties… singing, telling jokes
Sharing **P**ersonal **V**iews about learning	**PE**	'This is really dull'
Probing **Q**uestions (Facilitating a direct response)	**Q**	"Do you get what that means…?" "How does the CI compare to the standard interview, what does this question want you to say?" "What have you put for Question 6?"
Checking **K**nowledge	**K**	"Is MSM 3 or 4 stores?"
Talking about how they understood (**M**eta-**C**ognition)	**MC**	'let me tell you what I think it is'
Checking **U**nderstanding	**U**	"What does validity mean again?"
Checking **L**earning skills	**L**	"What do we have to do?" "When is that for?" "What does she mean by "cheatie card?" Can I see what you've done?"

Table 16 Coding used to evaluate video evidence

In setting out on this journey I had to decide how I was going to capture the way meanings were being constructed and re-constructed in those moments and how I would be able to do justice to this data in terms of fully capturing their meanings? I thought carefully about asking the students what they had meant but discarded this idea. Schwandt (1998) explained this difficulty of changing the point of view from the researcher to how the investigator explores the student's world view. He explained the difficulty of '…understanding the complex world of lived experience from the point of view of those who live it' (Schwandt, 1998, p. 221). I decided that asking students what they were actually doing would contravene an ethical agreement I had undertaken with them to monitor their study sessions whilst they self-assessed their sessions. It would have been incorrect of me to ask specific questions about each individual session as the students were aware that as their teacher I would review all of the data. If I had asked them what they were doing or thinking within a particular frame their responses would have been laden with desired responses on their part and so this idea was abandoned. As an ethical researcher I was constantly aware of my duty of care, as Pring (2004) suggested, to act using my 'ethical principles'.

As I taught the students five hours a week I was often able to make a judgement about certain behaviours that were ambiguous based on my codes and categories and knowledge of their persona in a classroom situation. I felt initially uncomfortable with these subjective opinions, but considered the relationship I had already established with the students enabled this approach and decided this additional emic perspective added meaning.

The quasi-thematic analysis allowed the vast number of videoed hours to be 'mapped out' rather than dissected and analysed frame-by-frame, minute-by-minute. Although this could be criticised, I decided the data could fragment and mapping the whole 'wood' or meaning maybe lost or as MacNaughten and Myers (2004) suggested the 'chopping up trees' (Silverman 2007, p. 63). Critically assessing the behaviours as well as determining the detail forced me to engage practically in a frame-by-frame analysis of the study sessions, coding each hour of interaction with a variety of groups. I completed coding the video data as the researcher, which had obvious interpretation bias of student behaviours.

To elucidate, some students used their I-pads / I-pods to check knowledge and understanding, making it difficult to tell whether this involved Face-book messaging which would be categorised as procrastination. As a novice to this, I found the boundaries often overlapped. For example, within the category 'talking about learning' (T) and 'talking about learning skills' (MC) i.e. when students were referring to a lesson where they learnt something (checking knowledge 'K') the categories were often difficult to separate. Despite these complications I propose my analysis of the videoed sessions allowed a valid picture of the 'woods' to emerge. The behavioural categories evolved as a result of viewing the study sessions one by one. This process was not easy for a new researcher.

The grandiosity of being a postgraduate researcher quickly diminished. Silverman (2011) was correct in issuing a warning to potential researchers about the time consuming and boring nature of thematic analysis. He was not completely wrong, so in order to alleviate the banal a word document was

generated for the first batch of saved video data files and video data was categorised using the codes selected in Table 16. An example of this word document for a one-hour study session is shown depicted in Figure 17.

It is important to note at this point that the coding and quasi-thematic analysis was by no means a complicated conversational analysis, such as from the work of ten Have, (2007) and neither follows an exact qualitative video analysis as with Knoblauch *et al.*, (2006) but a simple and less robust process of defining and understanding the framework of the students' learning sessions, and the 'participants voice' (Rapley 2011, p. 282) informed from the hours of video data.

Concurrent with the video data, a research or field diary (Burgess, 1981) was also kept in order to note contextual issues, home-work tasks set and issues of student relevance (for example social dates of interest such as Halloween parties and 'Santa Dash'.) This proved useful when students were discussing, for example, insufficient time for a certain task (Précis 14-20) which corresponded to fancy dress Halloween party (Wed 31st October, 2012) indicated in my research diary. The field diary and it's uses as an element of mixed methodologies are discussed later on page 179.

The saturation point was reached at approximately seventy-two hours of data from 44 collge 'A' students (20 DL, 24PGL). Qualitative researchers refer to this point at which no new information emerges and leads to fuller acceptance or 'applicability' (Keele, 2010). Following the coding of the seventy-two hours of data the recurring themes that emerged are displayed in Table 18.

	………..15 mins	……………30 mins	…………….45 mins	…………60 mins
P	/// /////	/	//	/////
O/C	////// //			///
PE		///		
Q	//	//		
K		/ / ///	/ /	
MC	///			/
U		/////	// / /	/ /
L	/ ////			////

Figure 17 Example of a document used to tally coded behaviours

In terms of concurrent triangulation, Bryman (2007) stated the usefulness of the video analysis was pivotal, as it would inform the questions for interview. The questions devised for the interview frame (Figure 59) assisted in clarification. For example Q1 'Please could you tell me about your study session' (referred to validation of T) and 'what sort of things did you talk about' and (referred to validation of MC). Furthermore Q5 which was 'could the session have confused your understanding (referred to validation of U and K).

Checking ***Knowledge***	K
Checking ***Understanding***	U
Checking ***Learning skills***	L
Talking about learning	T
Talking about their understanding ***(Meta-Cognitive)***	MC
Sharing personal views regarding the topic studied ***(Personal)***	P

Table 18 Recurring themes found in dyadic and peer-guided sessions

Data embellishing these categories are discussed in detail in the discussion chapter. Based on this video analysis I devised an interview frame.

The emergence of the interview frame

Silverman (2007) talked about the 'interview society' (p. 43) and how this type of qualitative method has become highly fashionable. The decision to select semi-structured interviews was to gain access to the students' world and how they felt about their learning experiences (Entwistle and Karagiannopoulou, 2013). The aim was to allow the students time to reflect upon what was happening during their study sessions, how they felt when it was successful and what failure felt like for them. In order to gain the 'native speaker' (i.e. in their own words, allowing the use of their colloquial terms) what social interactionists refer to as the 'actor perspective' time and an informal rapport was essential. The use of slang and colloquialisms seems to establish and reinforce a group identity. Allowing for creativity and a sense of playfulness that would otherwise be constrained. The 'native speaker' was essential to understanding the identities of the students.

Gaining access to this rich perspective was only successful if participants were willing and also able to 'confess their innermost thoughts and emotions to the appropriate professional' (Silverman, 2007, p.129). However when successfully active interviewing skills and the appropriate levels of rapport were established it was a particularly 'powerful research method for 'accessing individuals' attitudes and values – things that cannot be necessarily be observed or accommodated in a formal questionnaire' (Byrne, 2004, p.182). I aimed for a relaxed climate of trust, where students could feel their responses were not only

highly regarded but could express themselves how they wanted to. With this in mind, great care to accommodate and generate a relaxed rapport was built into the design and the delivery of the interview frame.

As a new researcher I found solace in much of the detailed textbooks and developed new skills through interviewing participants,becoming a researcher interviewing not just a teacher having a chat with her students. My skills improved throughout the trial runs where I worked specifically on not making judgements too quickly regarding non- verbal cues, strategies to set the student at their ease, listening carefully and actively, especially not trying to interrupt. In a trial run I had taken notes throughout the interview despite the recording which proved really useful in not 'shaping' or providing cues toward certain responses. This notetaking proved to be a valuable strategy to avoid nodding and non-verbal affirmations.

As this study aimed to investigate the experience of students transitioning into sixth-form the best people to ask were the students themselves. Improving our understanding of the social context of education and the relationship between student learners within the population of sixth-form learners is an epistemological shift into social constructivism. Oddly, students have not always been thought of as influential in informing better practice. Alasuutari (1998) explained that not long ago if you wanted to know something important about society you asked those 'in the know'. In contrast today, for example, Gubrium and Holstein suggested questioning those students who were experiencing the transition as the most 'obvious and efficient choice' (Gubrium and Holstein, 2001, p. 5).

Tierney and Dilley (2001, p. 458) suggested using students aimed to 'garner and represent the words and worlds of students and their peers, has been part of a movement to include the voice of those being educated in the learning process'. The aim of the interview frame was to enable the use of students' voices to illustrate themes, tensions and issues that were part of their lived experiences. Enabling a complete digital and written transcription was necessary and gained an insight to 'their own voice'. I used quotations from the student voices to illustrate and communicate the recurring themes and arising issues. Perhaps like Hermes, the messenger of the Greek gods, whose task it was to interpret the message to the rest of society, so students' voices could be hermeneutically interpreted in order to provide a resonance and appreciation by other audiences of the lived experiences of the participants in this study.

I did consider a number of different methods used in social constructivism and psychology before I arrived at the semi-structured interview. Arksey and Knight (1999) suggested that interviewing is a family of research approaches where each one is carefully designed to fit the specific purposes and I tend to agree. For example, the Adult Attachment Interview (AAI) was developed and defined for use in clinical and developmental psychology (Main, 2000) where a set of questions was designed to uncover and probe a number of different areas of an adolescent's relationship history. In my case I wanted the students to feel comfortable about unfolding their feelings and constructions of their study sessions in a potentially difficult situation. Formal interviews that were structured were not going to build a long-term relationship or allow the participants to relax and discuss their inner thoughts. I had also considered an informal conversation where the students might talk about anything, but both the students and I knew why I was conducting these conversations about their

study sessions so it seemed appropriate to design a structure that I could stick to. I also considered asking another researcher to conduct the interviews, but again due to the need for positive rapport I opted to be the interviewer. It was planned to advise and train my colleague in college 'B' to complete her interviews for the very reason of rapport as I did not know the students well enough. However due to problems it was not possible for interview data to be collected at college 'B'.

As an ethical researcher I created a draft series of questions, which formed the basis for the interview frame/guide/aide mémoire. The interview frame, (as illustrated in Figure 59 in Appendix), generated a series of semi-structured questions. This frame was inspired by Kvale (1996) and also Watkins *et al.,* (1996) who suggested questioning students about 'how' they learn was an effective tool. Watkins believed by asking students questions about 'why' and 'how' and the 'importance' of their learning the outcomes were conducive to a 'meta learning cycle' which not only allowed adolescents to see and make connections, but to see things in different ways.

The structure and order of questions and the recording of answers are important aspects of the semi-structured interview (Bryman, 2008). He suggested it was more powerful than a structured interview as it allowed for some latitude so that further questions significant to the research might be asked. In order that consistency across the interviews remained the interview guide was digitally recorded. Johnson and Rowlands (2012) stressed the importance of recording the interview verbatim. Furthermore the seating (angle of seating and 'rules of physical proximity' (Johnson and Rowlands, 2012,

p.106)), beginning and ending of the interview have all been meticulously considered.

Refreshments (tea/ coffee/water and custard creams were offered to all), levels of small talk, seating positions, levels of honesty for each interviewee were consistent, and a small bar of chocolate was given as a thank you to all. Some methodological tips Hennink *et al.,* (2011) suggested were adapted and incorporated into the semi-structured interview questions as shown in (Figure 59 in Appendix) .

As an ethical researcher the process of creating the right kind of questions and being able to deliver the questions in the manner I had planned was of great importance. As Pring (2004) suggested, I was constantly aware of my 'ethical principles' and had to consider the values of a teacher-student-researcher relationship with the utmost respect and dignity. The process of formulating questions, as informed by Bryman (2008) was important in developing the interview frame summarised for the reader in the flow chart on page 169. This process was time consuming and as a result of constant revisions and amendments I was happy with the interview frame that emerged.

Heeding warnings from Hartley (2013), short pilots in college 'B' were staged where the interview frame was administered with four students and the teacher from college 'B'. I also piloted the frame with three sociology students in college 'A' and I found the answers to be acceptably detailed, and the use of digital recording on my laptop proved invaluable for transcribing the interviews.

The flow chart depicted in Figure 19 illustrates how cruicial the piloting and revision process was for the successful generation of the interview frame. According to detailed analyses of interview protocols the type of interview frame that I developed allowed me 'a degree of freedom and adaptability in getting information from the interviewee' McNamara (2009, paragraph 1). Furthermore McNamara made some excellent suggestions including asking one question at a time, attempting to remain neutral (or as neutral as possible) and a note of caution not to lose control of the interview when some people might take overly long in their answers. Such fine-tuning necessitated patience and care as depicted in the flow chart below.

General research into area of study

Specific research questions

Video students study sessions and monitor self evaluations

Formulate interview questions by reviewing video footage and self evaluations

Revise interview questions

Pilot interview questions

Identify emerging and novel issues

Make further revision of interview questions - short pilot

Finalise Interview guide

Figure 19 Flow chart to explain how the interview frame emerged for the semi-structured interview for students

Researcher / teacher identity

As a researcher I had collaborated with two colleges. This had its benefits and limitations. Herr and Anderson (2005) offered a number of different researcher stances for a research methodology. My study took an 'insider in collaboration with other insiders' stance, a collaborative inquiry (a teacher collaborating with another teacher). This was chosen to heighten the representative nature of the findings and increase the resonance with the academic community. As I often noted in my research diary, this stance was not without logistical difficulties. The particular problems of meeting to liaise with the other college, to monitor the students' attendance and tracking whether they were completing their study sessions proved challenging when working collaboratively.

For example both the teacher in college 'B' and I agreed to collect the self-assessment tools on a regular basis. My field diary entry October 15th 2012 recorded exasperation when some students repeatedly failed to hand their completed assessments and 'left it in the library again'. However frustrating this was, I made reference to the British Educational Research Association (BERA) ethical guidance for educational researchers, updated by Jones (2011), which proved to be useful. It was paramount that as a researcher I was not manipulating students to gain data and it was always important that participants' rights were protected at all times.

In terms of the design of the study, and despite their usefulness, quasi-experiments (i.e. a teacher demonstrating an effect with their class) have been criticised. One particular problem in education has been the 'Hawthorne effect' where students realised they were participants in a study and thus changed

their behaviours. Surprisingly, for adolescents, adapting to a filmed or even monitored environment was not the difficulty. Despite Silverman (2011) warning of boredom, I witnessed some seriously funny periods during the analysis of video footage. These occurred during the first, second and third week of student study sessions. Here students often stopped their studies and 'talked' to the camera, asking what the camera thought of the matter in hand. The students also posed me direct questions (which I was obviously not able to answer) and often saw themselves as 'celebrity-like big brother' characters and discussed payment. I enjoyed some hilarious moments when students parodied my classroom phrases with realistic impressions of my accent, or better still created characters of their own and read aloud in an affected voice e.g. Ali-G or a mad professor with a Russian accent. It was evident here that the study sessions were quite good fun for some students.

When designing the study, I had imagined the students might not act naturally, but in fact the camera had very little effect on the realism of the situation. For example an amusing revelation by participant 'P14' in the first peer-guided learning session stated:

> 'If she is gunna do this thing…you work it out… she has got thousands of hours to look at …she isn't going to look through all of it ... Is she …she has got to be really sad if she's gunna do that'.

Categorised as O/C (off task chat) this part of the video analysis was highly enjoyable and a revelation. As a new researcher as well as a teacher I found this part of the data collection both interesting and challenging.

Academic achievement scores

A further quantitative measure collected within this study to represent academic achievement of the students, were the raw scores of students' final examination results issued in August 2013. This measure represented one whole academic year of study. All students enrolled on the course were required to sit examinations in January and June 2013 for them to progress to the next module and then to the second year of the course. (Since the time of writing, this practice has changed to only one set of examinations in the summer.) All students sat the examination, representing an assessment of their whole year's work. The examination covered the complete specification, set and marked externally by the examining body Assessment and Qualifications Alliance (AQA). This raw score constituted the most reliable source of data representing their academic achievement in psychology. 'Quantitative scores of students' academic achievement in a subject examination are the scores obtained in an examination or test' (Howcroft, 1991, p.111).

Examinations scores are a quantitative measure of academic achievement, which is a socially accepted norm. The measure of attainment is widely used for acceptance at entry to university courses (University Councils Admissions Services (UCAS, 2012)). Despite the reliability of external examinations, the actual scores in percentages and grades were used as a measure of their academic achievement. Therefore a quantitative measure of raw scores in examinations as assessed by AQA in terms of Uniformed Mark Scale (UMS) Centre for Education Research and Practice (CERP, 2012) score was used.

Notwithstanding the global acceptance of these measures, some researchers (and students even) may disagree that this measure is an accurate measure of academic performance. Students especially accept this is an externally reliable measure of their psychological knowledge, but it is not an externally valid measure. Qualitative measures may perhaps be of more value. A descriptive measure that would rely upon a student's self-evaluation of their performance may in fact be a more valid and meaningful predictor of their performance. Although a subjective measure, and hugely open to social desirability bias, it may give insight into a student's positive and negative reflections of their performance and attainment. In fact Hattie (2009) in his synthesis of over 800 meta-analyses relating to achievement stated students' self-reported grades (i.e.; their estimates of their own performance) were reasonably accurate. Similarly Kuncel, Crede and Thomas (2005) found that high school students had very accurate understandings of their achievement levels across all subjects (r = +0.80) i.e.: a strong positive correlation. In summary Hattie (2009) explained that students generally tended to know themselves, and were very knowledgeable about their chances of success.

However students do not always achieve their predicted grades. Often on, or shortly after the examination results are published, students may feel their examination script should be subject to a re-mark. The grade they achieve has a massive impact upon which university they can be accepted by, and as such inaccurate marking can have a drastic impact on an adolescent's life chances. Enquiries about results (EaR) have been a feature of many websites, blogs and news reports. Looking at four of the largest awarding bodies operating in the UK (AQA, OCR, Pearson and WJEC) there were 152,257 EaRs submitted in 2014 increasing from 117,277 in 2013 and 99,496 in 2014 (AQA, 2014). Similarly

figures reported by the Office of Qualifications and Examinations Regulation (OfQUAL) showed 19.6% of all scripts were changed as a result of an EaR (OfQUAL, 2014, p.3). For the education community who place their faith in 'A' level examinations being able to accurately and reliably assess a student's knowledge and understanding this leaves teachers and stakeholders in a rather uncomfortable position (TheSite.org, 2014).

In a review of early research, Brogan (1998) reported that the learners' level of achievement could be related to the perceptions they have of themselves as learners. She also pointed out that how learners feel about their abilities might, for better or for worse, consciously or unconsciously, influence their academic achievement.

In order to compare the students' actual attainment with predicted attainment scores Advanced Level Information System (ALIS) scores were used. These scores are commonplace within the education system and provide performance indicators for post-16 students across all sectors of education, both in the UK and internationally. ALIS first produced value added analysis in 1983, (TES, 1995) and since then the Centre for Evaluation and Monitoring (CEM) centre provides information for well over a half of all 'A' levels in the UK and internationally (CEM, 2011, 2014). School management systems use this baseline data, which is calculated using GCSE (General Certificate of Education) scores and its own alternative baseline tests as measures of ability.

Academic self-concept questionnaire

Academic self-concept is mainly measured as self-report. Thus the Self-Description Questionnaire-III (SDQ-III) developed by Marsh (1992) in its third version was designed specifically for adolescents. The instrument is a 'Likert-type' scale ranging from scores '1' (Definitely false) to '6' (Definitely true) where the global scores indicate academic self-concept. Revisions of this instrument were minimal but necessary.

As this research looked purely at academic self-concept only this factor was measured. The factors less pertinent and relevant were extracted. The SDQ-III was originally designed to measure self-concept in relation to eight non-academic areas, (namely physical ability, physical appearance, honesty and trustworthiness, parental relationships, same and opposite sex relationships, emotional stability and spiritual values or religious attitudes); four academic areas, (namely mathematics, general academic, problem solving and verbal reasoning); and a single global self-perception of 'self'. The original questionnaire consisted of 136 items. This study used four sub-scales; verbal reasoning, academic understanding of 'psychology' (i.e.: replacing mathematics), problem solving and general academic ability.

The questionnaire was modified to include only 40 questions targetting useful factors and removing irrelevant less pertinent factors from the original 136 questions. Following the premise that only the items pertaining to academic self-concept should be included Coetzee (2011) (as an Appendix in

Figure 57). Scholars warn against elongated questionnaires as they pose problems 'in terms of attention span, reading aloud and motivation' (Bywater and Brown, 2010, p.15). Marsh, Martin and Jackson (2010) reduced the physical self-concept questionnaire for this reason.

The quantitative scale was also reduced from a potential 8-option response to 6. Only 1 and 6 options were marked 'definitely false' and 'definitely true' respectively. The students were required to make their own ordinal judgements on the 6 point scale, including and between the two extremes. The six-point scale was reversed as in Möller and Pohlman (2010) so that higher scores indicated higher self-concept. The highest score that a student could obtain on the SDQ-III was 240, and the lowest was 40. If the total scores of the four subscales calculated into a high score, this would indicate that the student had a high academic self-concept.

Marsh and Martin (2011) suggested there were benefits to a longitudinal approach to measurement. One of the most important design features of studies measuring academic self-concept is the repeated nature of measurement. With over fifteen years of experience Marsh suggested a structural equation model from a longitudinal panel design i.e. measure on multiple occasions. Learning from this, my study gathered two assessments over a period of nine months in order to properly assess any changes and a possible linkage to academic achievement; this is referred to as a pre and post-test design.

Developed by Marsh and his colleagues (1992) to measure self-concept, the SDQ became a series of three instruments designed specifically for pre-

adolescents (SDQ-I), young adolescents (SDQ-II), and late-adolescents and young adults (SDQ-III) (Marsh *et al.,* 2010). The validity of the original SDQ has been 'strongly supported and accredited in the literature' (Lau, Yeung and Jin, 1998, p. 2). The SDQ in its original formats have been tested and supported extensively in Western and non-Western cultures, and have been found to be the best multi-dimensional self-concept instruments available (Lau *et al.*, 1998).

Other instruments such as the Students' Approaches to Learning Instrument (SAL) have successfully demonstrated (Marsh, Hau *et al.*, 2006) the importance of academic self-concept in educational research. Marsh (2011) reported the process to be rigorous in selecting the most effective constructs that measure the self-regulated strategies, self-beliefs and motivation and learning preferences and stressed their importance to educational settings (Marsh, Hau *et al.,* (2006). The academic self-concept data in this study was collected using the SDQIII questionnaire designed specifically for adolescents.

Although clearly a robust and validated instrument, Marsh (1992) himself identified a limitation of the SDQIII and suggested although designed for a specific age group it may be used with adults older than 25. Furthermore he also warned that the measure was not all encompassing and proposed that it may only tap into many important elements of adult lives.

Group interviews and 'structured eaves-dropping'

In order to gain group responses a date was arranged at college 'A' (8th May 2013 at 1.00) to invite members of each study context to discuss their experiences of study sessions. In the format of a group 'structured eavesdropping' (Powney and Watts, 1987) and with the use of a digital laptop recorder I was able to remove myself from the interview situation and leave the students to discuss a set of questions which I left for them to discuss whilst being recorded. The students were all aware that their conversation was being recorded; they completed an additional consent form and opted to attend at an arranged time convenient for them all. Figure 20 lists all of the posed questions;
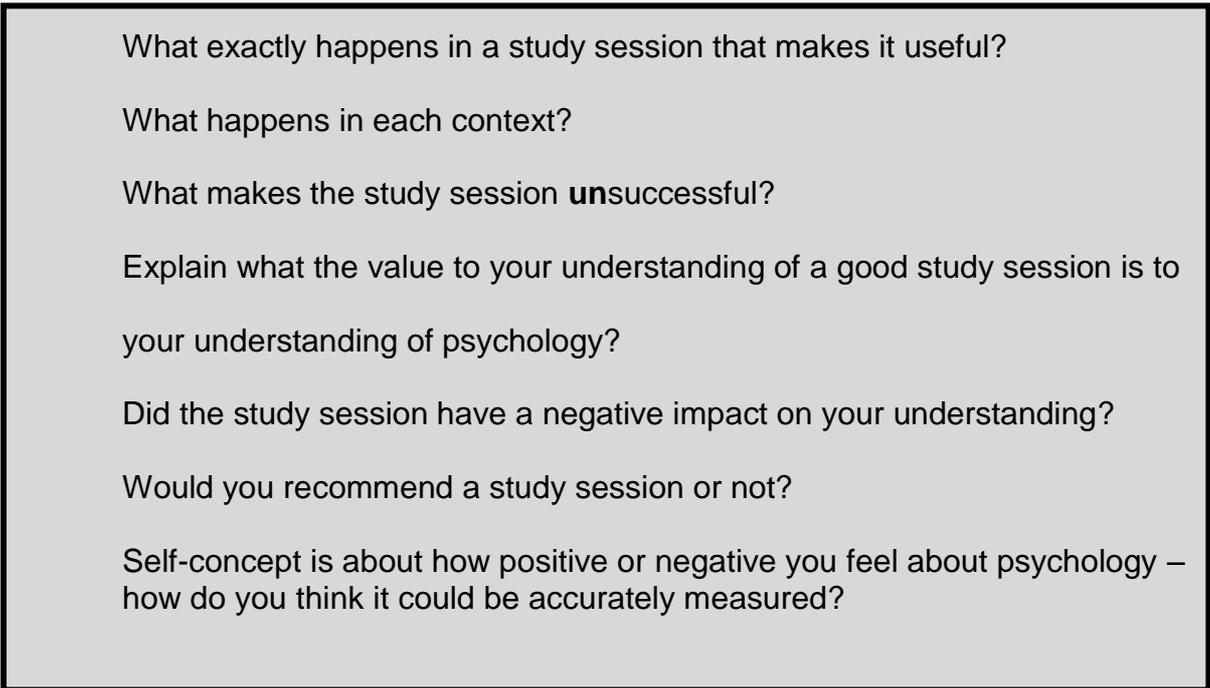
What exactly happens in a study session that makes it useful?

What happens in each context?

What makes the study session **un**successful?

Explain what the value to your understanding of a good study session is to your understanding of psychology?

Did the study session have a negative impact on your understanding?

Would you recommend a study session or not?

Self-concept is about how positive or negative you feel about psychology – how do you think it could be accurately measured?

Figure 20 A list of the questions that the students discussed

The questions were designed to promote open and honest discussion about their experiences in a study session and to evaluate those experiences at a peer level. (The full transcript of this interview can be found in Appendix as Figure 76).

I transcribed the group interview within a few days. This was vital, as the students may have forgotten what was said over time. The transcript was photocopied and distributed to each of them by recorded mail to their home address. They were invited to read the transcript and decide whether the group interview reflected exactly what was meant and what was inferred by non-verbal communication. Some students were puzzled that what they thought about the study session was of great importance to me were amused by the fact they had received a recorded mail document through the post.

Field diary

It was advised early on in the research process that a diary (Burgess, 1981) should be kept of what was said informally. These anecdotal records, as Rolfe (2001) described them, should be written after the event and 'describe a particular incident in a brief and, ideally, objective way' (Rolfe, 2001, p. 227). Duke (2012) used a diary effectively as a research tool, and after considering the advantages and limitations of the recording of notes and events and my own reflections I decided to use it as a worthwhile and ethical practice.

These notes were collated in a calendar (not loose-leaf as recommended by ethics committees) but due to different priorities as a full-time teacher and part-time researcher, the logistical nature of a school and the pragmatics of writing a diary entry in every day proved highly difficult. However whenever I met with my colleague from college 'B' we took minutes of the meetings, which were a useful frame of reference for my later analysis when I needed to compare dates and times. Although Rolfe (2001) suggested objectivity, what is actually written

down in the notebook depends upon the values of the researcher at the time. These notes were therefore never really objective in the empirical psychological science sense of the word. The entries were subjective and value–laden, nevertheless powerful as a reflexive tool.

Notes in the field diary were personalised and often illustrated disappointment (e.g. due to unforseed logistical and timing issues that it was impossible to organise interviews with college 'B' students). This meant that only a random selection from 55 college 'A' students were selected. I noted my frustration at the missed opportunities for data.

Word cards

Integral to the interview frame (Question 8) a further quantitative instrument was designed in order that students could, in their own words, self-assess their experience of the study session. Towards the end of the semi-structured interview students were asked to generate five word cards in response to two questions. These words cards were sealed into an envelope and signed and dated by the student. At a later date (almost nine months later) students opened the sealed envelope and re-assessed the words they generated in response to the questions:

- Describe how the study session has affected your knowledge and understanding of psychology

- How do you feel about your study sessions?

In terms of quantitative data each word was assigned a numerical value, which attempted to make a numerical jugdement on the students' feelings of their study session. Additionally students made an assessment as to whether they felt it had served as a useful tool for their learning and understanding of the subject.

In terms of a qualitative measure, whilst reassessing their chosen adjectives almost nine months later, it allowed students to reaffirm or evaluate the words true to their own feelings of worth and value. Asking the students to reassess their own words allowed them to reflect retrospectively on how their experience was evaluated at the time. A student liked this activity and commented it was rather like uncovering a 'treasure chest'.

I liked the idea of using the same data and merging the benefits of quantitative and qualitative data collection. This illustrated the value of a convergent mixed methods design. As Johnson and Onwuegbuzie (2004) suggested it was the 'class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study' (p. 17). Students' comments, words and phrases echoed constantly in my write up of this study. The reality of using their voices, their deliberately carefully chosen words, was how meaning was gained and so their voices resonate in this thesis.

Summary of mixed methods

Focus groups, structured validated ASC questionnaires, coding of video data, semi-structured interviews and 'structured eaves-dropping' were employed in order to increase the realism and resonance of the research. These methods are favoured by researchers who wish to understand the meaning of student interactions and communications, appealing to social constructivists and psychologists with Vygotskian roots. The combination of qualitative and quantitative methods as suggested by Denzin and Lincoln (2000) generated richness and deeper understanding.

This combination of data is now applied in many settings including professional, clinical and organisational settings. In clinical fields, for example, the meanings, reciprocal behaviours and words in expressed emotions of parents of schizophrenic patients are analysed (Bateson *et al*., 1956). Similarly assessors for the 'Investors in People' criteria, use a series of informal interviews to 'back up' the relevance of an organisational ethos (IIP, 2015).

Mixed methods aimed to extract as much meaning as possible from the lived experience of sixth-form transitioning students. The study also aimed for 'applicability', and 'consistency' similar to the notion of reliability according to Keele (2010) in her assessment of the requirements of a robust qualitative study. In light of some critics of mixed methods studies just 'mixing' methods for no particular reason, rather than using a particular method for its own worth, I have prepared Table 21 which illustrates the use and value of each method. Demonstrating the value of each method was affirmed by Hammersley (1996) as 'complementarity'.

Qualitative	How they link	Quantitative
Focus group generated student self-assessment tool-used in support of SRQ_1	$\Leftarrow$	Student self-assessment tool used to quantify effectiveness of study session - used in support of SRQ_1.
Word card descriptions and re-affirmation nine-months later-used in support of SRQ_1	$\Leftrightarrow$	Word card quantification-used in support of SRQ_1
Semi-structured interview cross referencing SDQ III questions- used in support of RO_1	$\Rightarrow$	SDQIII questionnaire measuring pre and post academic self-concept - used in support of SRQ_1
Semi-structured interview guide quotations and honest expressions - used in support of SRQ_1	$\Leftrightarrow$	Semi-structured interview Likert scale data cross referencing SDQ-III academic self-concept, academic effort and academic achievement - used in support of SRQ_1
Group interview- 'structured eaves dropping' – detailed discussion among peer-group - used in support of SRQ_1	$\Leftarrow$	Allowed a cross referencing with video data, student assessment tool + word card quantification - used in support of SRQ_1
…	…	ALIS predicted grades used in support of SRQ_2
…	…	AQA public examination UMS scores cross referenced with semi-structured Likert scale questions used in support of RO_2
Video and audio coding and thematic analysis used in support of SRQ_1	$\Leftrightarrow$	Video and audio tally list per hour used in support of SRQ_1
Field diary for good practice in a research process (Burgess, 1981)	…	…

Table 21 A summary of mixed methods and how mixed methods 'mix'

The convergent parallel design depicted on page 132 in the design section highlighted to the reader the dovetailing of the design. Further clarity and explanation is depicted in Table 21 illustrating the choice of one method was used not only to triangulate with other data sets but gained a cross referencing leading to a more trustworthy analysis. As an example, and with reference to Table 21, the supporting data from the quantification of academic self-concept using the SDQIII was cross-referenced with the interview questions regarding effort and academic confidence was used in support of research question 1. Similarly the 'structured eaves-dropping' data validated or 'legitimised' (Johnson and Onwuegbuzie, 2006) the video data and 'word card' analysis.

Remarks in interviews for example, often came right at the end where the student felt as though they were relaxed and could offer additional information. These interview remarks are not quantifiable, but were incredibly valuable statements and a 'very precious thing to the researcher' (Richie and Lewis, 2003, p. 167). Despite not being easy to code, it nevertheless spoke volumes;

> P33: '… I would like to say this whole study thing has been a great experience – I have defo told you how it is and it kind of makes me think a bit more about what I am doing and how it all should be helping and stuff, thank you for taking the … time… to chat to us all it has been dead good, thanks miss…'

This student had obviously valued the experience in terms of heightening her engagement with her studies, she had benefitted from meta-cognition and the study session experience had focused her attention on what she needed to learn and how. This resonated with me in my dual role as teacher/researcher and affirmed why this study was so important to me.

I now discuss the qualitative responses where an appreciation of irregular, messy, unusual and often uncomfortable data was critical to the process of reflexivity. In the next chapter what students said and how they felt about their transitional experiences served as insight into the new post-16 learner's world. It is important for the reader that the findings are clearly explained prior to the discussion chapter, which aims to evaluate the findings.

Chapter 3

Presentation of qualitative and quantitative findings

Introduction to data collection

In this chapter, I present the qualitative and then the quantitative data sets as a brief introduction to the substantive discussion chapter. I start with Table 21 as a route map of the way the qualitative and quantitative data sets linked together through the data collection methods used. The benefits and findings of 'researcher provoked data' and 'naturally occurring talk' (Silverman, 2001, p.159) are presented here. I appreciated there was no quick, easy or non-messy way to assess the visual and recorded study sessions. This messiness was in fact a reflection of the reality of the assessed situations. Locating myself within the heart of the interpretive process, although unusual and often uncomfortable, was critical to the process of reflection.

The emerging themes from the data were:

- The importance of academic self-concept,
- social identity of the student and their level of confidence,
- fun,
- choice,
- the value of others in the learning process
- emotional wellbeing

Qualitative data analysis

In assessing how students responded to their transitional experiences quotations and embellishments served as insight and 'voices' for the reader to access the new post-16 learners' worlds and will be discussed in the next chapter.

Data from video recorded group talk

Observation has a long history as a research method, a method now used for example to judge teachers against governmental assessment guidelines with the Office for Standards in Education, Children's Services and Skills (OFSTED) inspectors. As a data collection method, video observation was valuable in terms of not only what the students said, but what they did not say, what they spent their time doing, the topics of conversation they began, how they diverted their attention back and forth to their work, which led to assumptions about how valuable their time together was and what purpose it served. Analysis of one hour of footage allowed access to the private world of the studying groups.

Types of talk in small groups such as in this study have been studied at length. Littleton and Mercer (2013) for example suggested useful distinctions and categories such as 'disputational' (criticism, disputes and competitive rather than co-operative); cumulative talk, where everyone seemed to agree with each other, and repetition was common; and thirdly exploratory talk where everyone seemed to engage with questions and answers. Having studied such literature I decided on the following codes as illustrated in Appendix as Table 58.

The three categories referred to by Littleton and Mercer (2013) became evident in the observations. 'Exploratory talk' featured widely, for example in the peer guided learning groups the guide often began with Socratic-style questions;

> A (the guide): So this one…[reference to a printed list] reliability and validity – what's the craik here?
>
> P10: yeh…that's [pointing at the sheet] slightly different to… reliability isn't   it … it's like the opposite … um, to validity so when a test is reliable it is   not always valid or something?
>
> A: (the guide): What do you mean exactly…?

Here the guide (A) was helpful in enabling the students to question their own beliefs and showed skill in teasing out what they really meant, rather than accept a vague and inexplicit response.

Littleton and Mercer's (2013) 'cumulative talk' was less apparent. Some dyadic groups were more passive in their talk than the peer-guided groups. Two students who never missed a session and were incredibly reliable met every Tuesday 4-5pm. Their observational study sessions were often quiet. The students were passive and uncritical of each other. An example here with DL group 'P6' and 'P12' serves to illustrate this point;

> P6: Shall we do this [points to printed sheet of homework tasks]?
>
> P12: I've done this one and this one [points to list]
>
> [14 minutes of uninterrupted silent working followed.]
>
> P6: Checks phone and replies to message
>
> P12: OK?
>
> P6: Yeh [smiles], thanks.

[13 minutes of uninterrupted silent working – reading, writing and flicking of pages.]

Many of the study sessions for these two particular students seemed very agreeable. They did not know each other before they had arranged a study session together and seemed quite happy not to spend their time 'getting to know each other' but were eager to spend their time productively and effectively studying together. Their passive acceptance of each other seemed to fit how they liked to study. They occasionally asked each other for clarification of a concept, (code K- checking knowledge) but felt quite happy and content quietly working alongside each other. 'P6' and 'P12' established a routine to their subsequent study group sessions. After following their twelve study sessions I called this a 'Check Target – Learn- Check' cycle. For example they entered the study room, checked with each other what they each needed to do to progress, learnt for a while, then after perhaps 20 minutes or so they would check with each other that they were doing ok and then proceeded to learn on their own studiously writing, colouring in diagrams and making revision cards. At the end of the session they checked with each other whether they had understood the material. They then always completed the self-assessment sheets at the same time, packed their belongings and left. This 'Check Target – Learn- Check learning- learn – Check learning' seemed to work well for this dyad.

This quiet and fastidious pair of students was fascinating. As I knew them both personally as students their method of study was not a surprise to me as they were modest, quiet, pensive and careful students. Their study sessions were captivating, as they did not 'fit' accurately into a category of learner I had imagined and although needed each other's company did not need to discuss their work in order to study. I will discuss this style in the discussion chapter as students who were 'between the study skill contexts' (page 286) not dyads but

perhaps more 'parallel autonomous dyads' were unexpected findings and fell beteen the cracks.

Other groups were not as structured in their focus of an hour session. 'P11' and 'P17' found it difficult to settle at the beginning of several sessions and it seemed that 'P11' took the lead in creating the focus for study. She referred to this in her interview; she was honest and explained how the sessions were not always beneficial (answering 'No' to this question):

> P11 (DL): 'Well we didn't do always what we had to do but we went down the précis list – a good session is when we did 6 or 7 on the list, reading through the book, discuss it and then go off topic a bit, going on our phones a lot and then writing the 'cheatie' card up. Phones featured a lot, but we did do stuff.'

It was clear in subsequent study sessions with this dyad that 'P11' mainly took the lead and explained the content to 'P17', as it tended to deepen and consolidate 'P11's' understanding too (Brufee, 1995; Topping *et al.,* 2011).

When the analysis was being conducted it was necessary to watch the video carefully as well as follow the transcript notes, due to the number of verbal and non-verbal actions. For example often in a conversation between dyads students referred to actions that were deictic and used expressions such as 'that one'. It was therefore necessary to verify to what item on a list or page they were referring. This was not always possible even with both types of sound and video data to hand.

There was no evidence of 'disputational' talk' (Littleton and Mercer (2013) in either dyadic or peer guided sessions. Although some groups made reference to others not working and distracting them from their goal by 'messing about', no conflict was evident in the video sessions.

In terms of Bryman's (2007) 'concurrent triangulation', the usefulness of the video analysis was pivotal as it informed the questions for interview. This again reinforced one of the main reasons for this study's design. A mixed methods study combining 'the qualitative and quantitative approaches within different phases of the research process' (Tashakkori and Teddlie, p. 19, 1998) was more meaningful.

Data from semi-structured interviews

One of the suggested drawbacks of interviews, which is often a difficult concept to counteract, is the effect of the interviewer. Their teacher, who is also collecting evidence about them, interviews students. Although I made a conscious effort to stay as neutral as possible when posing questions and responding to answers, interviewer effects were not to be ignored. Students may have been aware of potential tone of phrase, body language, smiles or gestures unknowingly altering their responses. Although I was familiar to them, there remained a power relationship despite their eagerness to express their truth, and as an ethical researcher I was constantly aware of this imbalance in power. Despite these obvious issues I felt the interviews went really well and were a successful arena to collate reoccurring themes. When finishing her interview this student added an extra statement:

> P33 (PGL): 'No but I would like to say this whole study thing has been a great experience – I have defo told you how it is and it kind of makes me think a bit more about what I am doing and how it all should be helping and stuff, thank you for taking the … time… to chat to us all it has been dead good, thanks miss…'

This student had valued the research focus in terms of raising her engagement with her studies. Her meta-cognition and study session experiences had focused her attention more on how and what she needed to learn. From the interviews the student experiences were generally positive. Students who expressed some negativity tended not to overly accentuate negative experience and the themes that emerged from interview evaluation were positive. I have structured the themes into the following categories;

Three subthemes emerged from the semi-structured interview and were targeted in three questions. These were:

Deepening knowledge - whether the students thought that their learning context had any effect on making their knowledge 'stick'.

Academic self-concept - whether the students felt the learning context had increased their feeling of being better at psychology.

Connections with others- whether or not the students felt that a collaborative strategy was a useful tool in a transitioning period.

Each one of these themes will be discussed separately.

Theme: Deepening knowledge

A key focus which emerged was being able to use the study session to deepen knowledge (see Appendix Figure 68 for all of the responses to Question 4 and 5). Question 4 and 5 were phrased in the following manner:

Four

Could the session have deepened your knowledge?

Probe with… (How could a session affect your learning of the subject?)

Five

Could the session have made you feel less confident? – (how)?

Have the study sessions confused your understanding?

How do you know it is 'good' for you?

Table 22: Phrasing of question four and five

A Dyadic Learner responded in this way to Question 4:

P11: 'Yeh I think so, helping me to remember more and explore it more but when you talk about it and give examples helps… you to feel more related to the subject and the topic… to have an example in your head you can compare it to recent events… Things that have happened and psychology is always good banter… we talk a lot about what we are learning in the common room. To have an example in your head helps you to have embedded complex issues'

This response was relevant as not only did the students agree that the study sessions were important for deepening knowledge, they saw it as important to relate to real world situations. For the teaching profession this is referred to as deep learning and application. Discussing what they refer to as psychology being good subject matter for 'banter… in the common room' helped this student to consolidate 'complex issues' and create real life scenarios for theoretical concepts and study evidence. In this way this student had given a valuable example of how the study session had helped to deepen her knowledge.

Further still this student felt that the process of deepening her knowledge was through the process of talk. By trying to explain it to a friend in her own words and phrases both students benefitted. This finding in line with Tymms *et al.,* (2011) found peer to peer-mentoring to aid not only the receiving peer but benefitted the mentor:

> P11 (DL): '…it helped us to talk. It helped to talk to her about what she didn't understand and it helped to … by saying it out-loud… helped her to know what I was understanding better… if you know what I mean [consolidate?] yes that's the word consolidate.'

Although it may have seemed that as an interviewer I put words into her mouth, by offering her the word 'consolidate', even though I was perhaps beginning to get rather excited and enthusiastic, I did not feel this word was at all foreign to her. Furthermore she explained at the end of the interview she was now fairly sure this type of learning intervention had really helped her to deepen her knowledge and understanding:

196

P11: 'For me – being able to discuss it 'coz the best way is to TELL others and it makes me feel I've got it more; to discuss it with others is great for me. Helps to motivate me to do more work and then start work, I then look forward more to the lesson and feel more motivated before the lesson'

Some of the interviews with students made it increasingly clear to me that I needed to be mindful of my dual role as a researcher and teacher. As their teacher they listened to me when I offered learning advice or practical suggestions to assist their study skills. This student for example from the autonomous learning context, had listened to such advice I had offered to her as her teacher:

P17 (AL) (week 4): … 'When you made us do the pre reading it did help 'coz when you explained it in the lesson I felt I had already done it, but reading without an explanation I don't get it at all so that means I don't look in the cat book much.'

Although as their teacher these kinds of comments would be appreciated, as an ethical researcher the dual role offered challenges and has attracted a considerable debate (Cousins and Earl 1995; King 1995). The tension between my dual role as their teacher/researcher was never really adequately resolved and in order to retain my ethical researcher profile I was careful not to offer advice or give feedback as a teacher might.

From a positive point of view, this careful analysis of this student's response has allowed me to 'sharpen my critical eye' and open my eyes to constantly query professional practice for the benefits of the students. Listening to this particular student's comment I realised that my own professional background,

skills and subject knowledge were seen as the essential requirements for a 'real' learner. I did not want the students to compare themselves with me. I felt it was important not to model 'teacher and psychologist'. I tried not to use, or explicitly demonstrate, my own strategies and abilities but perhaps I did fail to be able to adequately hide it. Similarly students were bound to use me as their 'role model' as for some of the students I was their only ever psychology teacher, and certainly their only experience of being interviewed by a teacher who was also conducting research. I was engaging in a self-handicapping (Rhodewalt and Tragakis, 2002) strategy as a way, as I thought at the time, of protecting the students and debunking socially and culturally constructed myths (Erben, 1996) about being good at learning. At this point I had not fully understood the impact of my own 'given out and given off' (Goffman, 1959) signals of being a learner in psychology and knowledge, which of course Tashakkori and Teddlie (1998) warned against.

In summary it seemed that whether alone or collaboratively, students who engaged actively during a study session deepened their knowledge and increased their academic self-concept.

Theme: Academic self-concept

Question 3a asked students to indicate their 'feelings' about what constituted a successful study session in order to triangulate their responses from the self-assessment following each session. This question was, 'Can you describe what the session felt like for you when it was going well?' Further probe questions were written in the event that no responses were verbalised. An example of a further probe was, 'What did it feel like when the study session was described as 'mediocre', weak or pointless?'

A student from a dyadic context was brutally honest with herself. She began with a negative perception by explaining she could have done a lot more (and in a self- deprecating tone) but then reflected on how the session had made her feel more confident and thus more able:

> P42; 'I felt I had wasted time and felt like I could have done a lot more and this made me feel disappointed, and made me feel I had achieved something – when we didn't have anything to do we did some pre learning – this made us more confident – I still remember Christiansen and Hubinette 'coz it refreshed my memory and I can still remember talking about it.'

'P42' was employing a 'self-protecting' strategy in order that her self-efficacy (Bandura, 1997), (Hattie, 2004) was maintained. 'P42' had decided she was not a 'good student for remembering studies'. Self-protection is a strategy to maintain the self (Forgas and Williams, 2002; Higgins *et al*., 1987). Similar to self-protection strategies, Freudian and Neo-Freudian psychodynamic theorists and psychiatrists such as Valliant (1992) and Anna Freud (1937) suggested this

process of protection was via the vehicle of what has become a detailed categorisation of 'defence mechanisms' against a barrage of potential failure opportunities. Such defence mechanisms as denial as well as intellectualisation, reaction formation and projection were common strategies to protect the ego or the viewable self.

However in terms of academic self-concept the experience strengthened her understanding, made her feel more confident and led her to believe in herself a little more. Similarly student 'P11' from a dyadic context illustrated how the use of 'being able to talk to each other about a tricky topic' helped her grasp of the topic and her understanding and as she explained this made her 'feel' clever:

> P11: 'When it went well … It felt good to understand it and more confident…It made me feel excited to know the stuff easier and helped to grasp it better. I felt clever.'

As I listened to these responses I imagined Hattie's rope analogy and for 'P11' I felt her rope was certainly beginning to strengthen. In terms of academic self-concept these quotes were strong evidence for a collaborative strategy. Similarly student, 'P33' from a peer-guided context explained how she found the transition into sixth-form a difficult one and wanted to 'drop out' of college in the first couple of weeks. Recent governmental advice to schools was clear about how to help students at such risk. Problems resulting from anxiety could significantly affect a student's ability to learn, to maintain and sustain friendships and schools are now dynamic in their abilities to help (DfE, 2014). 'P33' explained how the groups helped her to feel more included which in turn helped her to feel more positive about her subjects which then in turn helped her to persist with her studies:

200

P33: 'I felt better about myself, if I was productive it made me a little encouraged and happy…supported…nice…better about coming to college and I don't want to come if I know others like me are struggling…for example you can ask questions to each other [if you don't understand].'

These quotations from students illustrated the power of collaborative strategies and illustrated the positive effects for 'P33' in terms of her 'zone of emotional development' (Holzman, 2009) and as a transitioning student the valuable connections she made with others.

Theme: Connections with others

In the semi-structured interview question 7 probed the perceived benefits of a collaborative learning strategy in a transitioning period from GCSE to 'AS' level learning. Linked to the main research question, this question aimed to access the personal opinion of the students following their 12-week experience. The initial question without any probe questions was 'Are there benefits for you to working with others / alone, what are they do you think [-leave silence to think]?'

When this question was posed to a particularly vulnerable and fragile student she explained how she was close to dropping out of college and was watching others similar to herself beginning to 'crack' under the pressure of 'A' levels. So when student 'P33' exposed herself and said quite honestly:

P33: 'I tried working alone and swapped to this group after one session and knew it worked when I felt positive about it'

Knowing their background a little, student 'P33' needed the support of others at that fragile time and as such I considered this strategy to be a success for this student. In the same way other students such as 'P24' found it very difficult to study alone at home and therefore did very little homework in the first few weeks. He explained:

> P24: '…I have no motivation at home… and not much better here [at college] or in the library and so it helps [peer-guided learning] to help you get it with a bit of banter with your mates.'

The banter and social support was of great value to students such as 'P24' who felt this inclusion into a group of great emotional value illustrating the zone of emotional development (Holzman, 2009). In fact without the informal atmosphere he explained he might not have persisted with the group.

Similarly the experience of two students in a dyad reported their sessions to be 'mint' (suggesting this was a good feeling). In analysis of their videoed evidence they spent a great deal of their study hour laughing and telling jokes (sometimes about the work) and making a positive experience of the study sessions. This light-hearted approach may have contributed to their persistence at college too as they were students who found the work particularly challenging.

Connections with others were also important without talk. Students silently worked alongside each other week after week the quiet 'interrelatedness' to which Flum and Kaplan (2012) refer. The transition period lasted for 12 weeks, but some pairs and groups continued their regular slot into their second year of studies. Similarly connections with others were made by quietly slotting into a regular library routine where librarians noticed regular autonomous learners

persist with their study session into the summer term (after almost 11 months) and were able to recognise these students by name as they became more familiar.

Data from group-interviews – 'structured eaves-dropping'

As a result of the one to one interviews, and in an attempt to counteract demand characteristics and interviewer effects, questions were prepared on printed and laminated materials. Table 23 shows the questions posed. A randomised sample of students from each learning context (2 from AL, 2 from PGL and 2 from DL) contributed to the group interview. Thus a group interview or 'structured eaves-dropping' was conducted where my laptop was placed in the corner and students discussed a series of questions printed onto laminated cards. The questions were cut up and were placed on the table in no particular order. However interestingly the transcript showed some silence at the beginning while one student began to sort the questions into an order. Uncannily the order in which they were sorted was the order in which I had imagined the students might approach the discussion. The students answered the questions in a discussion. The group interview was transcribed and a number of themes emerged.

☺ What exactly happens in a study session that makes it useful?
☺ What happens in each context?
☺ What makes the study session **un**successful?
☺ Explain what the value to your understanding of a good study session is to your understanding of psychology?
☺ Did the study session have a negative impact on your understanding?
☺ Would you recommend a study session or not?
☺ Self-concept is about how positive or negative you feel about psychology – how do you think it could be accurately measured?

Table 23 List of questions posed in the group interview

Themes from group- interviews

A number of themes were identified from their conversation where

Table 25 makes references to the themes and sub themes adding an example.

Some themes were a surprise to me and others were reasonably expected. The

themes I had expected to emerge were those of feeling confident with

statements linked to academic self-concept, identity as well as their positive

wellbeing and retention. Other themes emerged such as the need for choice,

the element of an informal and fun learning environment as well as the positive

requirement for other people to be involved. These themes were collated and

analysed and are explored at length in the discussion.

Sub-themes from group-interviews

Further to the themes that the students' transcript revealed, a number of factors

linked to these themes and essential for the study session to be deemed as

effective and successful also emerged. These features are captured in a further

Table 26 with examples. These subthemes merged with analysis and are

discussed at length in the discussion.

Recommendations from group-interviews

Students were asked to respond to and then later evaluate their responses to

the question: 'What would you recommend to students starting 'AS' level in

September?' The students arrived at a number of ideas that might benefit

future transitioning students. Their recommendations to sixth-form leaders and

administrators were of value. So much so, that some of these themes have also

informed the final themes and are further analysed in the discussion chapter.

These recommendations are captured in Table 24 with examples for illustration.

Recommendation 1	Offer a taster of each session to all first – let them try all three and see which suits
Recommendation 2:	Spend **time** selecting groups of friends (in week one)
Recommendation 3:	Offer a good room
Recommendation 4:	Meet the guide and see if personality fits
Recommendations 5:	Appreciate individual differences in evaluating its effectiveness – some people need more help than others

Table 24 Recommendations made by students from Group Interview

Students were asked to respond to and re-evaluate their responses in a completed print out of the transcription (in Appendix as Figure 76). Here it is interesting to note that some of the participants took their role very seriously. In her responses student 'P29' had mentioned in a note post transcript that she did use the time in the session effectively and that 'cheatie' cards were one of her main sources of revision. I did not challenge her as to why she wrote the note or as to why she had such a negative opinion on the day as this would alter the boundaries of teacher and researcher and thanked her for her thoughts to the questions 'What makes the study session unsuccessful and successful?' Some of the sub themes are illustrated with examples.

Theme 1: Positive feelings and its effect of collaboration	Theme 2: Negative feelings and effect of collaboration – better alone	Theme 3: Personality of Guide mattered	Theme 4: Beneficial for making friends which is essential in transition times	Theme 5: Fun and informal learning
P7: In a group, it is more valuable because it is like reading from 5 different books instead of one that… its like getting everyone's point of view, its easier as you have more information P29: Yeh, like having it rephrased….it may then make it more understandable coz you have heard it 3 or 4 times and so like you haven't just heard just one person and the way they have	P11:Like if you came out and you felt like it was a bit of a waste…and you wanted to go home half way through and you felt you were wasting your time, like I wanted to go home and do it all again by myself	P29: She is like one year above.. she was, well quite helpful, She was quite like shy P7: Yes she was really shy P29: So we managed to … end up talking at her… P7: She like did her own work in the session P36: Sounds helpful! [Sarcastic tone]	P7: You have to feel like comfortable and confident because if you don't and nobody makes any contribution….with them, you don't want to be awkward yeh that one… P29: Otherwise you have to end up doing it on your own... or wanting to be on your own…	P29: To be fair, in the sessions where we did do something, like either {name} or {name} took charge and we ended up doing like 'cheatie' cards or something like that for twenty minutes. P24: In ours we basically did like homework and if we got stuck she liked helped us out a bit and got us all to work harder and that…. It was alright, at least we did stuff.

Table 25 Table showing main themes identified in group interviews

Subtheme1: All were focused	Subtheme 2: Structured time and place and organised.	Subtheme 3: When had a specific task	Subtheme 4: Friends who you could work with
P7: When you come out having actually learnt something P29: Like when you did the evaluation things at the end, the words you coloured-in, it made you feel like, how bad or how well it actually went …	P24: Yes, I just don't have the will power to do it by myself, I need someone to push me and say ….yes… to push me to do other things P7: It is good in that sense then Further… P7: I would have suggested it [the study session] to be organised… 'coz everyone always says oh yes I am going to be well organised but nobody really is …	P29: I think it would have been better if we did homework or something together, but instead it was basically like make 'cheatie' cards	P7: Yes so you didn't know you were going to be friends with those people in the group, so it is hard to make a group straight away. P29: I mean it did help towards developing friendships and things like that and getting in a group P24: I find when I am with other people doing it I find I get more out of it, it like I need them to give me a bit… of like a push or something like that

Table 26 Subthemes identified in a group interview with example

Qualitative data from word cards

Integral to the interview guide a section with both quantitative and qualitative questions was designed for students to reflect on their study experiences (seen in Figure 59). Student evaluations of their knowledge and understanding and how they *felt* about their study sessions showed that those who chose a collaborative learning context evaluated their experiences more positively than the autonomous learners evaluated theirs.

Led by Freeman (2009), collecting data via a social constructivist perspective was of great interest. Students in college 'A' used words and phrases to describe their own transitional experiences. Students were asked to write five adjectives on cards. These word cards were then sealed into an envelope and signed and dated by the student. At a later date (almost nine months later) students were asked to open the sealed envelope and re-assess the words again to the posed questions:

> Describe how the study session has affected your knowledge and understanding of psychology? and... How do you feel about your study sessions?

Their adjectives were evidence for effective transitional experience and the use of study groups was effective. When the words were placed in front of me such as in Table 27 and Table 28 they did seem to 'feel' very positive.

Nine months later these students had the retrospective ability to review how they made their transition from a GCSE student to a well established 'A' level student. They were invited to open their sealed envelopes and reveal the 5 adjectives they had written previously. With this enhanced ability aided by time, students

considered carefully how they felt. However, some may argue that due to the retrospective nature of the evaluation individuals tended not to be accurate in their assessment. Recall or hindsight bias (Hoffrage and Pohl, 2003) is well known to affect the accurate recall of events. Despite this 'knew it all along effect', I suggest students were accurate in their descriptions of how they felt and none of the students changed their responses, which is in fact quite telling that they were accurate reflections at the time. Please refer to the tables overleaf.

Learning context	Dyadic learners			Autonomous Learners			Peer-guided learners		
	DL1	DL2	DL3	AL1	AL2	AL3	PGL1	PGL2	PGL3
Q1 (Describe how the study session has affected your K and U of Psychology?)	Improvement	Happier	Confident	Confidence	Super	Beneficial	Rewarding	Reinforced	Confident
	Happier	Much better	Deeper	Dependent	Better	Short amount	Always increasing	Helped memory	Motivated
	Higher level of understanding	Get it more	Memorable	Average	Confident	Enough	Still room for improvement	Effective	Positive
	Feel ready	Helpful	Vivid	Good	Like to make sure I know it	Not deep knowledge	Confident	Needed	Supported
	Like I wont forget the important parts	Canny	Picture-able	Better	Confident in the fact I can get it if I try	Ok	Positive	Grateful	Needed

Table 27 word card descriptors of study sessions for Question 1

Learning context	Dyadic learners			Autonomous Learners			Peer-guided learners		
	DL1	DL2	DL3	AL1	AL2	AL3	PGL1	PGL2	PGL3
Q2 (How do you feel about your study session?)	At times useful	Okay	Procrastinating	Hard	At my own pace	Productive	Positive	Positive	Supportive
	Helpful	Not bad	Glad	Great	Fine	Calm	Less reading which is great for me	Helpful	Fun
	Achievement	Get it better	Fun	Sometimes useless	No stress	Relaxed	Helps gain confidence	Encouraging	Happy
	Helps understand different ways of learning	Useful most of the time	Positive	Helpful	Useful	Happy	Productive	Effective	Fruitful
	Effective	Worth-while	Effective	Glad	Time well spent	What I needed	Deepens knowledge	Rewarding	Beneficial

Table 28 word card descriptors of study sessions for Question 2

Summary of qualitative data analysis

The chosen adjectives in word cards, their voices and actions in video evidence, semi-structured and group interviews were reflections of their truths. Capturing these words offered an insight into their real lived experiences of transition into sixth-form. 'Qualitative methods are more faithful to the social world than quantitative ones' (Gergen and Gergen 2000, p.1027) and seemed to allow for data to emerge more freely. This was one of the main reasons for conducting the study in the first place; to understand fully what the real life experiences were like for a transitioning sixth-form student.

The general themes that emerged were of happy, positive and supportive experiences. Some students were pragmatic and truthful and referenced procrastination and 'always improving' suggesting that some of the sessions were not as effective as others, this was however reality. Students also reported the need to chat in order to get that 'stuff out of the way' to allow clearer focus. This element of fun and informal learning was a clear theme, which is illuminated at length in the discussion.

The benefits of using qualitative data were invaluable in unravelling the experiences of a transitioning sixth-form student. The frame by frame videos of students studying together were quite banal if I had played them to others. However the unremarkable was usually of great interest. With the approach of pragmatic methods and looking to see 'what works' in mind, the use of qualitative data allowed an exploration and descriptions of students' feelings and experiences. In their own words I have captured their narratives and not cut it into segments for statistical analysis.

Some of the themes that have emerged from the words students have used, the phrases they have coined, and the relationships they have discussed were of interest. These themes were evident in the literature review and echoed in students' voices. For example students discussed the social support they experienced by not feeling alone and realising they were not the only one to be feeling this way. Holzman (2009), Hall (2003), Ladyshewsky (2000), and Woolfolk *et al.,* (2001) support this with their ideas of emotional wellbeing and Yorke and Thomas (2003) with reducing loneliness.

Not only were these themes supported in the literature review but were supported in the recommendations the students themselves had made. They had valued the experience and suggested in order to enhance the experience for future students that recommendation 2 and 4 should be considered. These recommendations or future considerations, were regarding making contact with each other prior to the study sessions to get to know people better as well as meeting or even choosing the guide beforehand, in order to map together a cohesive working atmosphere. Such suggestions were of course extremely useful and in an ideal world where we could choose our teachers, coaches, guides and peers what would the parameters be?

I now discuss the quantitative elements of the study, the instruments and data sets used. I also explain how the numerical data illuminated the qualitative data and search for interpretations based on mixing the data as Hammersley (1996) suggested.

Quantitative data analysis

In this section the quantitative nature of the data is expressed statistically and the significance of this is explained. The research question or 'hypothesis' in terms of probability is explained. The data is expressed in graphical format in order that the reader has a clear understanding of the transitional students' data responses. In keeping with the study's social constructivist underpinnings the traditionally termed hypotheses were referred to as research objectives (RO).

The research question:

What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?

In line with a social constructivist framework for the study its advantage is that it 'force(s) researchers to think systematically about what they want to study' (Bryman and Cramer, 2001, p. 3). The usefulness of this process was that the findings can be 'fed back into the theory' (Bryman and Cramer, 2001, p. 6). Thus the aims of this study were to achieve a thorough investigation into the main and subsidiary research questions.

Subsidiary research questions

Is there a difference in the academic self-concept of adolescents who use collaborative learning strategies and those who use autonomous learning strategies?

SRQ1 showed no statistically significant difference between collaborative groups and their academic self-concept at 5% significance levels. Analysis of interview questions revealed that collaborative groups had higher levels of academic confidence and academic effort than autonomous learners. Analysis of individual responses in a one to one interview revealed those students who chose collaborative study methods experienced a greater confidence. Quantitative word card analysis revealed collaborative learners were more positive about their knowledge and understanding.

The second subsidiary research question (SRQ2) (Is there a positive correlation between academic self-concept and academic achievement?) revealed a positive relationship ($p < 0.05$ $r = 0.299$) between pre and post scores of academic self-concept with students' attainment scores at 5% significance levels.

Descriptive statistical analysis and data collection in MS Excel.

The collection of academic self-concept scores, students' session evaluation scores, the ALIS grade predictions as well as the actual examination results were all collated in MS Excel. In this study I referred to ALIS grades as the Advanced Level Information System known as 'ALIS' which provided performance indicators for post-16 students across all sectors of education both in the UK and internationally. My database allowed 'COUNT-IF' statements totals, averages and standard deviations to be calculated with ease. Similarly the databases were designed with SPSS input for a later date for analysis purposes (Sah, 2009). Thus a series of secure MS Excel databases were created in order to collate the following accurately;

    a. Academic self-concept pre and post scores

    b. ALIS and AQA public examinations result scores

    c. Student self-evaluation of study sessions scores

Quantitative results of interview regarding academic confidence (AC), academic effort (AE) and academic achievement (AA)
Quantitative word card analysis

Each of these databases is explained briefly:

a) Academic self-concept pre and post scores

Given the subjective nature of self-concept a student self-report measurement is most appropriate. For this database the shortened version of the Self-Description Questionnaire (SDQ-III) which measured self-concept in global and specific areas for late-adolescents and young adults was adapted to include only 40 rather than 136 questions proposed by Marsh (2010) as discussed in chapter 3. Following the completion of the paper questionnaire students' responses were typed into a password-protected sheet in Excel. This score represented their pre-academic self-concept. Nine months later the same students completed the same questionnaire identified either by their name or participant number. This score represented their post-academic self-concept. According to the manual (Marsh, 2010) the raw scores from questions 5, 13, 21, 29 and 37 were manually reversed. The two columns of raw scores were compared and a percentage difference was calculated. A screen shot below (Figure 29) serves to illustrate how the scores were collated:

A	B	C	D	E	F	G	H	I	J	K	L	M
	PINK INDICATES SCORE HAS BEEN MANUALLY REVERSED											
	Number of particpants			1	2	3	4	5	6	7	8	9
Question number	Item code	Measure	Details	AL	DL	AL	DL	DL	DL	GL	DL	AL
1	k2	PSYCH1001	4	6	4	6	6	5	5	4	5	5
5	score to be reversed K6	PSYCH1014	1	5	5	4	5	4	5	4	3	4
9	k10	PSYCH1027	2	5	3	5	5	3	2	5	6	6
13	score to be reversed K13	PSYCH1040	1	4	3	4	5	3	4	4	4	3
17	k18	PSYCH1053	2	5	3	5	5	3	4	4	4	5
21	score to be reversed K21	PSYCH1066	1	4	3	4	3	3	3	2	3	4
25	k26	PSYCH1079	2	5	3	4	6	3	4	4	4	5
29	score to be reversed K29	PSYCH1092	1	4	4	3	5	3	4	4	3	4
33	k34	PSYCH1105	2	4	2	5	5	2	4	5	3	4
37	score to be reversed K37	PSYCH1118	1	5	5	4	5	4	4	5	4	5
	PSYCH SUBSCALE TOTAL		17	47	35	44	50	33	39	41	39	45
	VERBAL SUBSCALE											
2	k3	VE1006	5	2	3	5	3	5	3	4	6	4
6	k7	VE1019	5	5	4	3	6	4	4	3	3	3
10	k11	VE1032	2	2	2	4	2	3	3	3	1	3
14	k15	VE1045	4	6	4	1	6	4	5	1	6	5

Figure 29 'Screen-shot' of the database of pre and post ASC reversed scores

The data used for academic self-concept was collected by means of a questionnaire completed prior to the study session beginning and then again after nine months (i.e.; pre and post). The existing validated instruments were adapted for this study in order to be more relevant (Coetzee, 2011) and applicable to this investigation. This investigation made use of only four subscales where verbal, psychological ability, problem solving and academic were named. The questionnaire thus consisted of four subscales; generating forty questions (10 questions in each subscale) see methodology chapter for more detail.

When scoring the questionnaire the handbook required (Marsh, 1990) that on each of the sub-scales, five of the ten items needed to be reversed when scoring the questionnaire, as they are asked in a negative form. The highest score that can be obtained per sub-scale is 60 and the minimum is 10. A high score on the different sub-scales indicated the student had a high self-concept on the construct that is being measured by that particular sub-scale. For example, if a student scored 60 points on the academic sub-scale, it meant that the student had a high academic self-concept. The highest score a student could obtain on the SDQ (III) is 240, and the lowest score is 40. If the total score of the four sub-scales was high, it indicated that the student had a high academic self-concept. Raw scores were collated using an MS Excel database.

b) ALIS and AQA public examinations result scores

The data used to represent the academic achievement scores were the results of AQA public examinations in May 2013. These scores were raw marks translated into uniform mark (UMS) scores and were translated into grades by a publically accessible grade boundary allocation. In this context I referred to UMS as a way of translating raw marks achieved in a unit into a mark that was used to compare with those achieved in other series. AQA report that the 'UMS balances out differences between exams and is a way of making sure people get the correct grade, no matter when they took a particular unit. UMS marks from all the units are then added together to give an overall mark for a qualification' (AQA, 2014b).

ALIS scores enabled schools and the academic community to generate predictive data and value-added analyses specific to each student and each subject. In this investigation ALIS grades were used similarly as a baseline assessment in which to compare whether the students attained above or below this predictive assessment. Both of the colleges 'A' and 'B' purchased the services of ALIS and thus data was available on each student during the transitioning period of September to October half- term. The data was used as a predictive statement of a minimum expected attainment.

 An MS Excel spread sheet was collated with individual student scores, their predictions and password protected. This allowed data calculated above or below the ALIS prediction. A screen shot is found below.

B	C	D	E	F	G	H	I	J	K	L
Number of particpants		1	2	3	4	5	6	7	8	9
Item code	Measure	AL	DL	AL	DL	DL	DL	GL	DL	AL
k1		1	2	3	4	5	6	7	8	9
ALIS GRADE in WORDS		A/B	A/B	C/D	B/C	E/U	C	B	C/D	C
ALIS GRADE in NUMBERS		9	9	5	7	1	6	8	5	6
Grade achieved in January 2013		B	C	B	B	C	E	A	B	C
Grade achieved in Numbers January 2013		9	6	8	8	6	2	10	8	6
Grade achieved in June 2013		A	C	B	A	E	C	B	E	B
Grade achieved in Numbers June 2013		10	6	8	10	2	6	9	2	9
Points above or below ALIS January 2013		0	-3	3	1	5	-4	2	3	0
Points above or below ALIS August 2013		1	-3	3	3	1	0	1	-3	3
FINAL GRADE in WORDS August 2013		B	C	C	B	D	C	A	C	C
FINAL GRADE score August 2013		155	125	132	155	104	130	165	120	136
FINAL GRADE in NUMBERS August 2013		9	6	7	9	4	6	10	6	7
Points above or below ALIS August 2013		0	-3	2	2	3	0	2	1	1

Figure 30 A screen shot of the 'MS Excel' data base for ALIS / AQA grades

c) Student self-evaluation of study sessions scores

In order to quantify the students' evaluations of their study sessions each student at college 'A' and 'B' completed a 'Wordle' (see chapter 2) following each of their study sessions. When this was generated by the focus group each word was assigned a value. The value attached to each word is shown below in Figure 31. This meant that when entered into a database a simple 'COUNTIF' statement calculated how each student evaluated their study sessions. These values then were totalled and these totalled summed evaluations were used as quantitative data. For example if a student highlighted the words 'effective', 'helpful', 'allright' this would generate a total score of 5 (effective) + 4 (helpful) + 3 (allright) = 12 evaluation score as per the focus group assigned values.

Group 1	Group 2	Group 3	Group 4	Group 5
Effective	Helpful	Allright	Ineffective	Futile
Positive	valuable	Average	Weak	Useless
Fabulous	practical	Goodish	Tame	Timewasting
Rewarding	Fruitful	Satisfactory	Indifferent	Worthless
Competent	Useful	Okay	Mediocre	Pointless
Productive	Rosy	Ok	Fine	Silly
5	4	3	2	1

Table 31 Values (1-5) attached to each word that generated the 'Wordle' evaluation

Not all students were always able to complete their evaluation sheet. Some students even handed in a sheet that was blank. In these cases, rather than use unreliable retrospective data the word 'NONE' was inserted into the database, which generated no score. The totals for the 3 different groups were compared as illustrated in the table below. Here the total scores, measures of central tendency and measures of variance were calculated. The mean averages did not differ greatly, although the autonomous learners evaluated their sessions less positively.

What this data illustrated was very little in terms of statistical significance and merely showed that those students who were dyadic learners seemed more positive about their study sessions than the other contexts. The peer-guided learners were the least positive about their study session effectiveness and evaluated the experience as the least positive across the three contexts. I began to question the usefulness of their evaluations, but felt the process of reflecting on how they had studied, might develop some thoughts about the 'worthwhileness' of their hour. As a researcher I began to feel rather frustrated at the missed opportunities for analysis. The frustration of receiving empty sheets led me to question whether the instructions were clear enough. The self-assessment tool was important for understanding a students' perception of their study experience and without this the strength of my findings would be diminished. I decided to always leave a pile of printed self-assessments sheets available as small reminder in the library study areas and the study group rooms.

The measures of variance around the mean were also of use here as they indicate the spread of the scores around the central point. It seemed from
Table 32 the dyadic learners had assessed their experiences with a greater variance, thus potentially explaining some individual differences in evaluation perception.

Context	Autonomous Learners self-assessment	Dyadic Learners self-assessment	Peer guided learners self-assessment
Total	903	1154	671
Mean average	34.73	39.93	37.27
StD	13.28	17.04	13.26

Table 32 Mean differences in self-evaluations of AL, DL and PGL contexts.

The descriptive data illustrated in the table above shows the differences are marginal. This can be explained in a number of ways. Perhaps those who chose dyadic learning were naturally more positive. If these students were more positive in terms of their personality or attitude to their study session then this is a confounding variable.

With the view to try and investigate any existing anomalies in the data I investigated the number of incomplete sheet study evaluations to determine whether there was a difference in some learning contexts and the number of NONE sheets returned (i.e. those which were returned incomplete). As is evident from Table 33 there was no real difference in incomplete sheets i.e. missing data. This seemed to have no link to the learning context and maybe simply reflected on how the instructions were made clear or simple levels of forgetfulness.

Context	Autonomous Learners Number of NONE	Dyadic Learners number of NONE	Peer guided learners number of NONE
Mean average	2.0	2.33	1.72

Table 33 Mean averages of missing evaluation sheets 'NONE'

d) Quantitative interview findings- (regarding academic confidence (AC), academic effort (AE) and academic achievement (AA))

Academic confidence is inter-related with self-efficacy. Shoemaker (2011) suggested that there was an 'interrelatedness' and found those students who were more confident positively correlated with academic performance. Saying this however, some adolescent students at 'A' level were still at the mercy of peer pressure and other normative social influences such as not wanting to be perceived as 'a swot' or as reported by Jackson (2006) 'lads' and the 'ladettes', which affected their academic confidence.

The beliefs held by students about their academic competence were considered to be particularly important, as they impacted particularly on student learning and achievement (academic self-efficacy) (Bandura, 1997) and academic self-concept (Marsh, 2007). Students who are confident but hold 'realistic' expectations regarding their academic performance and their independent study in higher education tended to perform better than those with unrealistic expectations (Nicholson, Putwain, Connors and Hornby-Atkinson, 2013). So it would seem that academic self-concept is closely linked to actual achievement outcomes in school. The effect of low academic self-concept and the frequency associated with feelings of learned helplessness may result in students giving up easily in the face of difficulty and adversity and not persisting long enough to discover that success is possible (Butkowsky and Willows, 1980).

Thus asking students about their academic confidence, effort and perceived ability was of great interest to triangulate these pertinent questions and validate the students' academic self-concept scores. It has been noted in the literature that academic confidence (often referred to as self-efficacy) is generally associated with

the use of more effective learning strategies and study skills shown by Robbins, Lauver, Le, Davis, Langley, and Carlstron (2004) and the use of deep learning strategies in Ferla, Valcke and Schuyten's (2008) study. The summary tables illustrated that students using a collaborative strategy responded more positively regarding their academic confidence.

Students with good study skills soon realised that academic effort was something that involved time spent in the library or study areas. The study skills required attention or concentration, association, organisation or encoding and reflection. Differences in these skills 'may explain more of the variation in grades than study time, study habits, or proportion of classes attended' (Michaels and Miethe, 1989, p. 318). A variety of factors are linked, the quality of effort for example and the likelihood of flow-like experiences, as documented by Csikszentmihalyi (1997), are difficult to measure. Here he described 'flow' as the state of total involvement in an activity that consumes one's complete attention. It remains difficult for students to assess their effectiveness and flow and quality of effort in terms of self-reporting. Asking students to rate to what extent they wasted their time may not have been the robust measurement, as I had envisaged.

Furthermore I know from a personal level of non-procrastination that it generated a feeling of challenge, peak achievement and sense of success rather than anxiety (Messmer, 2001). Seo (2011) reported procrastinators were not likely to perform better in examination results as they put their own pressure on themselves by procrastinating and avoiding work and thus creating their own flow for cramming for example.

From the numerical sets it seemed that even autonomous learners valued the ability to 'help their mates' and 'having a friend helps me' even though they studied alone with a mean average score of 13.25 compared to a dyadic score of 11.25. However what this high score may infer was because students studied alone they were more able and academically prepared to assist their friends with help. Similarly the peer guided learning score of 14.25 indicated that learning with others was beneficial. What this does not indicate was how having a friend helped.

The data set on academic effort was clearer. Most students realised that a great deal of effort was needed to attain academic success. However what this does not show was whether they thought that working with others was either a help or a hindrance to their academic success. The numerical data had value, but combined with the qualitative data it was enriched.

Questions regarding <u>Academic Confidence</u>	Mean score		
	DL	AL	PGL
▪ Having a friend to study with is useful. ▪ I am able to help my mates with their work. ▪ Having a friend helps me ▪ I often feel like giving up on psychology ▪ Having a study buddy has made me feel better about psychology	11.25	13.25	14.25
Questions regarding <u>Academic Effort</u>	Mean score		
	DL	AL	PGL
▪ If I work hard I will get better grades. ▪ I miss more study sessions than I go to ▪ I find 'A' levels easier than I expected.	9.0	8.75	9.75

Table 34 Mean score responses to academic confidence and effort questions by learning context.
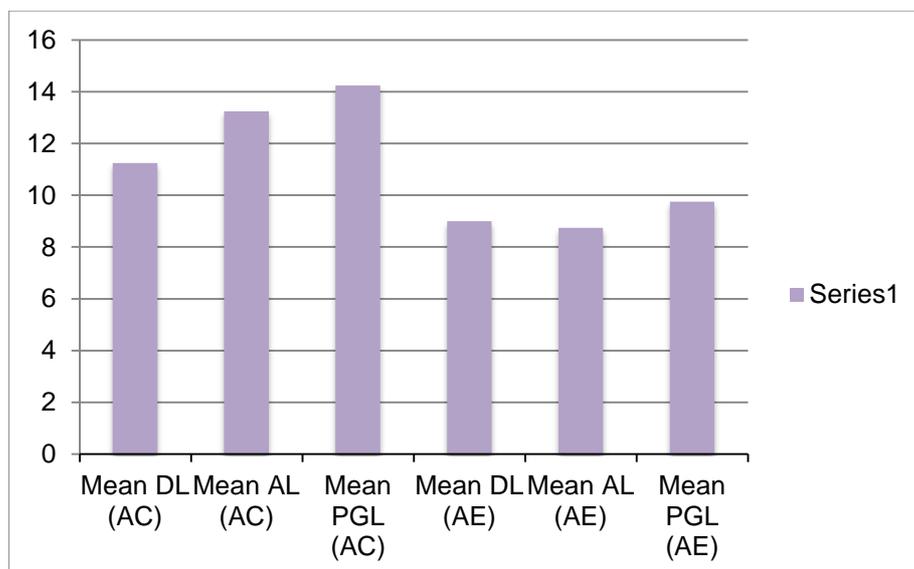
Figure 35 Bar chart illustrating the distribution of mean scores in response to questions regarding academic confidence and effort.

A mixed methods study such as this allowed data from semi-structured interview, word card and group interview data to interconnect the two streams of data sets. The quantitative data from the word card analysis for example saw the collaborative learners as more positive about their study sessions (with a combined average of 122 for PGL and 115 for DL compared to 102 for autonomous learners). This might have been a feature of a collectively completed assessment. If students were completing the self-assessment straight after their study session they may have in fact collaborated with each other on their responses. This was in fact interesting, as they spent some time reflecting together on whether their session was effective, how they felt about their study session, this in turn may have caused them to discuss this with other colleagues and may have made an impact upon the questions from the word card summaries.

e) Quantitative data from word cards

Integral to the interview frame (Question 8) a further quantitative element was incorporated in order that students could, in their own words, self-assess their experience of the study session. Students generated 5 word cards in response to 2 questions. These words cards were sealed into an envelope and signed and dated by the student. At a later date (almost nine months later) students opened the sealed envelope and reassessed these words again in response to the questions:

- Describe how the study session has affected your knowledge
  and understanding of Psychology.
- How do you feel about your study sessions?

In order to use this data from a numerical as well as a meaning perspective I assigned each word with a numerical value as Table 36 below. This served to attempt to 'operationalise' the students' feelings of their study session as well as whether they felt it had served as a useful tool for their learning and understanding of the subject (academic self-concept).

Rating	Adjective / rating
5	Very positive
4	Reasonably positive
3	Neutral response
2	Negative
1	Very negative

Table 36 Researcher ratings assigned to word card responses

Attempting to fully 'operationalise' an emotion such as positivity was without doubt an onerous task. However for the purposes of looking at numerical differences it made some headway, attempting to quantify how the student assessed their experience.

Summaries of the chosen adjectives are found in Table 37. The sum of the rating descriptions showed that the collaborative learners (DL and PGL) saw their knowledge and understanding of psychology as positively affected by the study session. The positive words and phrases chosen by the students such as 'productive', 'helps gain confidence', 'beneficial', 'super' were rated higher than by autonomous learners.

From a social constructivist framework this data generated strong support for working with others. What this meant was, upon reflection nine months later, students in the DL and PGL (i.e. in collaboration with others) groups felt their study session experience in a transition stage did improve their subject confidence, knowledge and understanding. This group of students, albeit only 6 randomly selected students from the total of 73, valued their experience more positively than autonomous learners rated theirs. This generated some support for SRQ_1. Although the sample of students here is small, the evidence gained from interviews dovetailed with this quantitative finding. In chapter 4, I explained how in the semi-structured interviews students reported the collaboration positively especially in terms of emotional wellness, (Holzman, 2009) 'more minds together' (Frank, 1986), other people helping to generate understanding (Vygotsky, 1978) and working in a shared environment (Crook, 2013).

A further look at 'question 2' indicated that the peer-guided learners were more positive about their learning session than the other two groups. In terms of the social constructivist framework upon which this study is based, this is a positive finding. Students in this group rated the experience higher than those who studied alone.

Despite this data analysis, the samples of three students per learning context may attract critique as an unrepresentative sample. I was not attempting at any point for generalisation and this analysis served as an assessment of each individual student. I suggest that sample sizes are incorrectly thought to correlate with generalisations. I concur with Gorard (2006) who explains there is a misconception that no matter what the number of participants, the research question, or the methods of analysis 'the choice of what to include permeates every level of the research process and thus any type of data gathering exercise can either reduce or increase subjectivity and objectivity as it wishes.' (Symonds and Gorard, 2013, p.5).

To me the notion of representing a fixed population of sixth-form students is rather nonsensical as they all differ so incredibly. I therefore place real value on these small but genuine findings especially as the students had very little to benefit from in telling untruths or writing adjectives more positive than they considered accurate. The value of dovetailing the qualitative findings in with the quantitative findings has allowed a deeper interpretation to be made.

Learning context	Dyadic learners			Autonomous Learners			Peer-guided learners		
	DL1	DL2	DL3	AL1	AL2	AL3	PGL1	PGL2	PGL3
Q1 (Describe how the study session has affected your K and U of Ψ ?)	21	20	20	16	20	14	19	21	20
Q2 (How do you feel about your study session?)	19	17	18	16	17	19	21	21	20
Total	40	37	38	32	37	33	40	42	40
Totals for Question 1	61			50			60		
Totals for Question 2	54			52			62		

Table 37 Showing word card summaries for Q1 and 2 (yellow indicating DL, green AL and blue PGL.)

Levels of significance

The use of a statistical test of significance was to provide a probability (or estimate of likelihood) that the sample of participants used in this study differed from an assumed target population. A test of significance provided what is considered by researchers to be an estimate of the probability of a sampling error. As de Vaus (2002) explained 'the probability of a sampling error is less than a set level (e.g. 5 per cent) (de Vaus, 2002, p. 170). The significance level tells us nothing more than this and clearly fails to indicate a rich understanding of the nature of the relationships between students.

In order to statistically test SRQ2 a Pearson correlation between two variables, in this case the students' academic attainment and their difference in academic self-concept scores, revealed a correlation coefficient. A 'p' value affirmed the statistical relationship between the variables in this particular group of seventy-three students. The correlation coefficient revealed nothing about the relationship among a wider population. The correlation coefficient (+ 0.2966) and the 'p' value were calculated with a test of significance at 5%. This 'p' value indicated that for the 73 participants it is 95% certain that there was a weak positive correlation between the two variables.

As stated the 5% level of significance used in this study is accepted in psychological and educational research. The results that follow were calculated using the SPSS (Statistical Package for Social Sciences produced by IBM), a computer software program.

Inferential statistical analysis

SRQ$_1$ investigated whether a difference existed between pre and post academic self-concept scores for all 73 transitioning students. Using median data the groups for autonomous learners, dyadic learners and peer-guided learners were compared. The following table illustrates the frequencies between the subscales pre and post (Table 38).

Concept	Psychological Academic Self-Concept Total (Pre)	Verbal Academic self-concept Total (Pre)	Academic Self-Concept Total (Pre)	Academic Problem Solving Total (Pre)	Psychological Academic Self-Concept Total (Post)	Verbal Academic self-concept Total (Post)	Academic Self-Concept Total (Post)	Academic Problem Solving Total (Post)
N	73	73	73	73	73	73	73	73
Mean	32.23	33.90	31.97	33.15	37.22	34.41	32.07	34.79
Median	32.00	33.00	32.00	33.00	39.00	34.00	32.00	35.00

Table 38 Frequency Table illustrating the central tendencies of five subscales

The median scores were analysed using a non-parametric test with 2 related samples. The frequency data shown in Figure 39 illustrates the pre and post distributions which are used to inform the use of a statistical test of inference. The two subscales denoted in **purple** representing psychological academic self-concept and **blue** representing academic problem solving. The complete set of graphical distributions is found in the Appendix as Figure 67.

A Wilcoxon 'T' test was chosen as the sample data were related (i.e. the same person had both a pre and a post score). This statistical test assesses differences using ordinal data.
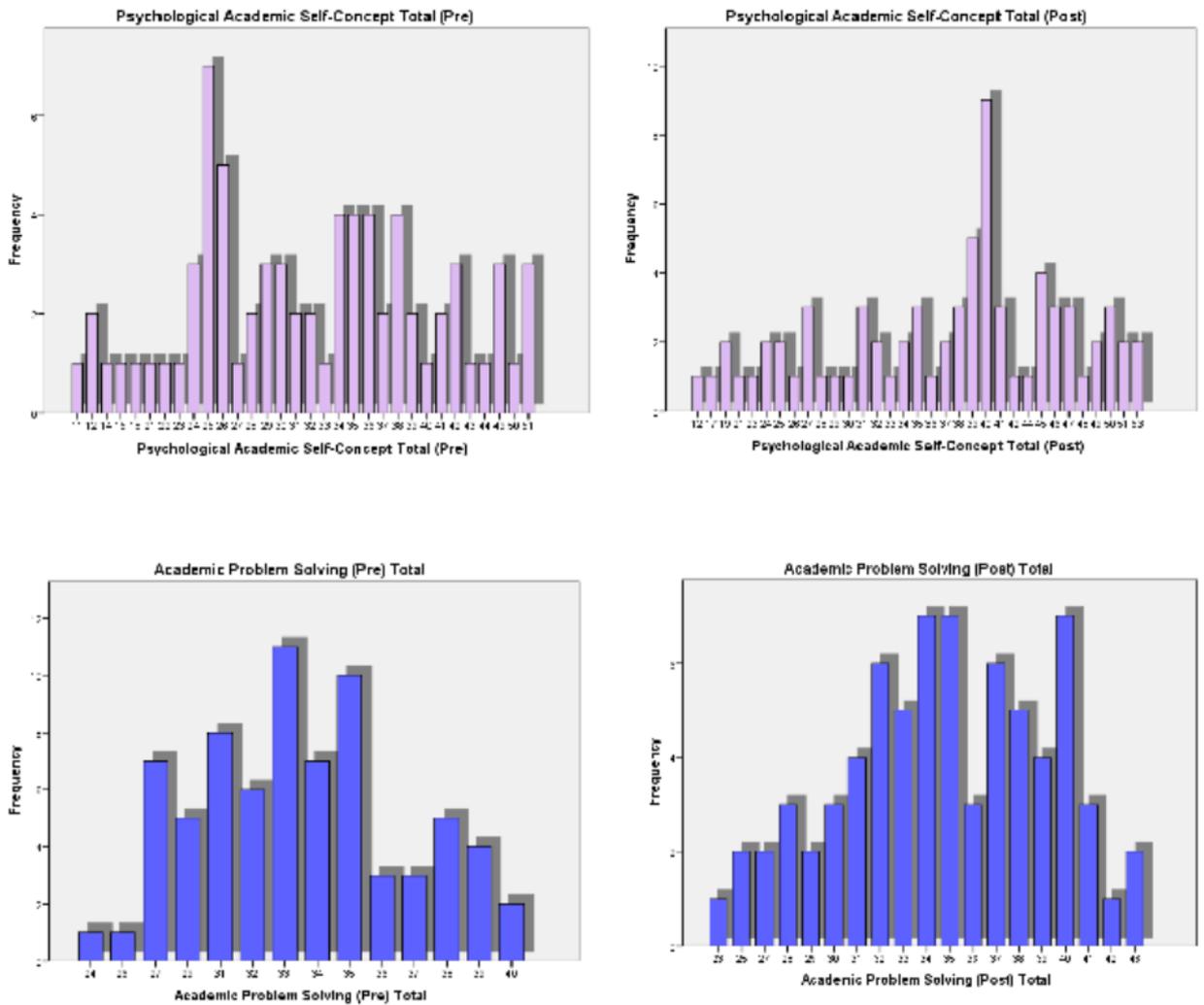
Figure 39 Frequency bar charts representing pre and post scores

The subsidiary research question one (SRQ1) shown in Table 40 was found not to be significant. This meant there was no significant difference between the academic self-concept scores (pre / post) of the collaborative or autonomous transitioning students groups.

SRQ1	Significance at 0.05	Decision
Psychological academic self-concept PRE	0.73	retain the Null
Verbal academic self-concept PRE	0.122	retain the Null
Academic self-concept PRE	0.184	retain the Null
Academic Problem solving PRE	0.301	retain the Null
Psychological academic self-concept POST	0.187	retain the Null
Verbal academic self-concept POST	0.540	retain the Null
Academic self-concept POST	0.815	retain the Null
Academic Problem solving POST	0.85	retain the Null

Table 40 Hypothesis test summary PRE and POST academic self-concept

Although no statistically significant differences were shown in the table above the frequency distributions in the graphical representations (Figure 39) revealed some apparent variations. For example the frequency of psychological academic self-concept as well as academic self-concept was higher in the post questionnaire. This was worthy of a further statistical analysis to investigate the difference between pre and post scores of psychological academic self-concept and academic problem solving. The graph in Figure 41 and Table 42 show how the difference was significant at the 5% level of significance.

This meant that in terms of psychological academic self-concept there was a statistically significant difference between before the students began their studies and after their studies. With Wilcoxon tests, an obtained 'T" is significant if it is less than or equal to the critical value. P = 1.83< 0.05. The findings are above the level of chance.
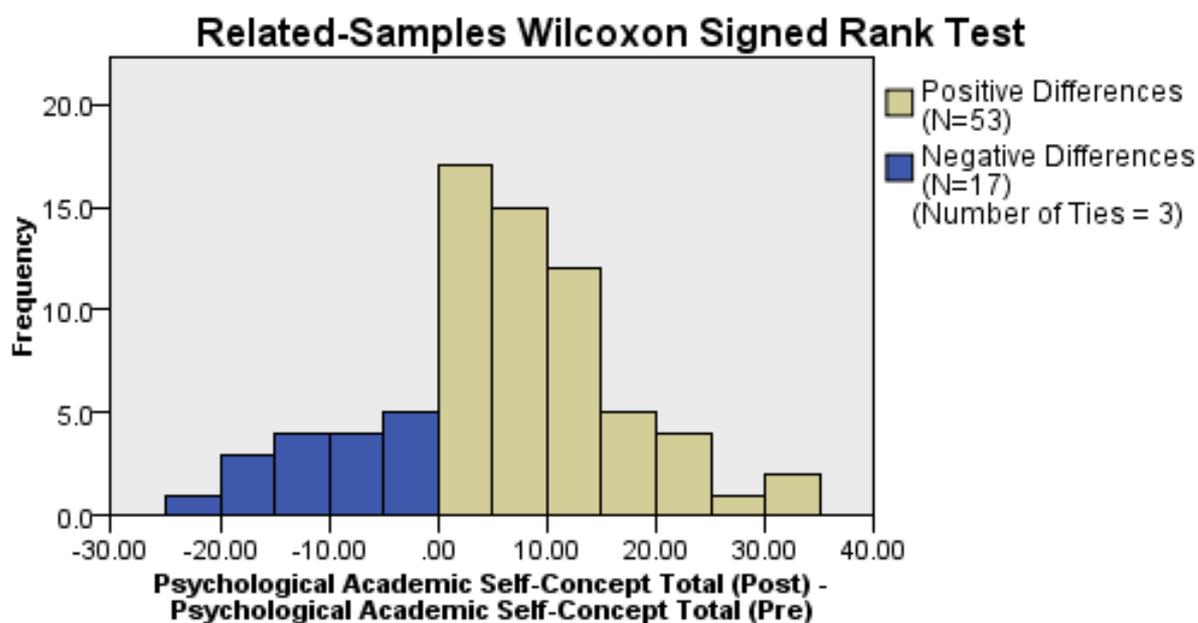
Figure 41 Psychological Academic self-concept pre and post showing a statistically significant difference

Total N	73
Test Statistic	1,873.000
Standard Error	170.777
Standardised Test Statistic	3.692
Asymptotic Significance (2 tailed test)	.000

Table 42 Statistical significance pre / post psychological academic-self concept

Similarly the difference between pre and post scores for academic problem solving was also statistically significant at a 5% level of significance. This meant that there was a significant difference in the academic problem solving scores of students from the beginning of their studies to the end of their studies. The findings were above the level of chance.
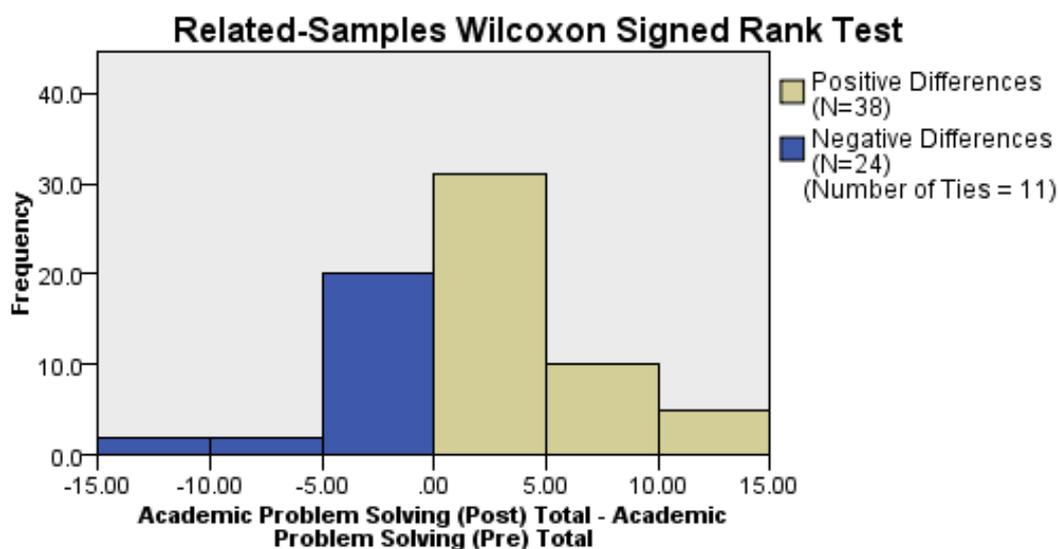
Table 43 Academic problem solving pre and post scores showing a statistically significant difference.

Total N	73
Test Statistic	1,290.500
Standard Error	142.304
Standardised Test Statistic	2.207
Asymptotic Significance (2 tailed test)	.027

Table 44 Statistical significance pre / post scores for academic problem solving

The data sets indicated there was a significant increase in psychological academic self-concept. As a professional teacher I had hoped that students at the end of the

course had a significantly higher academic self-concept than when they began the course. This meant that students were significantly more confident about their psychological knowledge than when they began the course.

What the scores of academic self-concept did not show though was an increased perception in knowledge and understanding. This was however shown in the 'word card' analysis as well as the questioning via semi-structured interviews that clearly indicated a positive difference. This concurrent methodology has enriched a basic statistical significance. Not only did the students' academic self-concept scores increase significantly but their perceptions of academic confidence over nine months were also reported to increase in the interview analysis. This reinforces the importance of a convergent mixed methods strategy.

Further inferential statistical analysis

Finding the scores of psychological academic self-concept as well as problem-solving self-concept to be significantly different pre and post scores was of great interest. I decided to look closer at the individual scores and calculate a 'hierarchical cluster analysis'. This examined which particular individuals scored particularly higher pre and post. This illuminated details in relation to their chosen learning context. This statistical analysis is often used in marketing for example to identify people with similar patterns of past purchases so that marketing strategies can be tailored towards them (Norušis, 2012, p. 361). Here the hierarchical cluster analysis was used to determine which groups of students assessed themselves with increased psychological academic self-concept and problem solving scores.

Although this further statistical analysis revealed no significance about the pedagogical context, I decided to look at the people who were the participants within certain clusters. This revealed some interesting clusters. For example there may have been some similarities in how the students preferred to spend their study sessions. Within one particular hierarchical cluster consisting of a combination of peer-guided, dyadic and autonomous (participants 22, 24, 13, 44, 55, 4 and 73). Looking closely at these participants as individual students participants 'P24' and 'P22' were of particular interest. I decided to review the video evidence of the peer-guided sessions these students belonged to in order to notice any similarities. As a reference the hierachical cluster analysis can be found in the Appendix as Figure 78.

As 'P24' was selected for interview and generated the adjectives for his word cards in the third phase of the study I took a closer look at his responses, in order to look for a 'dovetail' in these data sets. Students 'P24' and 'P22' responded more positively in their 'post' academic self-concept scores. 'P24' reported in the semi-structured interview the PGL context to be of personal value because it had facilitated a learning environment with other students, helped him to bond with others and as a result he felt an emotional attachment. These elements were evident throughout the study as statistically significant findings as well as relevance and prerequisite for certain students.

Review of the research question

What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?

There seemed to be lots of answers to this question. Some data sets had clearly provided evidence that an intervention such as dyadic, peer-guided or autonomous learning created a better focus for study and aided the transition from GCSE led learning to independent study skills. Some numerical responses provided no statistical differences and suggested no differences between the groups existed. This did not however mean that the intervention of study skills did not have an effect on performance. Evidence provided by a student at interview echoed in my mind as I reflected on the findings, I reiterate her words:

> P33: '…this whole study thing has been a great experience – I have defo told you how it is and it kind of makes me think a bit more about what I am doing and how it all should be helping and stuff, thank you for taking the … time… to chat to us all it has been dead good, thanks miss…'

Here she reflected upon her ability to study, when it worked and when it failed, what she gained from a good experience and when it failed. Spending the time thinking about this with the students was apparently of great value to many of them.

Quantitative analysis of interview questions revealed those students who chose a collaborative strategy reported a higher mean level of academic confidence than those students who worked alone. Assessing themselves on a 'Likert' (1932) scale, dyadic and peer-guided students also 'felt' as if the study session was more effective

than those reported scores of autonomous learners. In terms of descriptive statistics this supported the social constructivist framework upon which this study was based. This data showed the benefits to working with and among others helped the students to not only 'feel more confident' but agreed it additionally aided their 'knowledge and understanding' of psychology.

In terms of their self-evaluation of the study experience a small sample of participants were asked to assess and then re-assess (9 months later) their perception of their transitional intervention. From the data collected, students who engaged in collaborative strategies were more positive than autonomous learners about their experiences. This higher score suggested collaborative strategies were beneficial for students transitioning into the world of 'A' level study where new teaching and learning strategies, as well as a new academic subject, created an unfamiliar environment. The presence and support they received from other peers and more knowledgeable others (MKO) benefitted their emotional and learning experience. From this data it was clear to say that collaboration with others aided their academic self-concept.

Results and discussion of subsidiary research question 1

For the purpose of clarity I numerically catalogued each finding individually and stated all of the findings related to SRQ_1 in the table below;

As academic self-concept was made up of four factors each factor was carefully analysed:

1. Academic self-concept totals

    a. Verbal academic self-concept

    b. (Generic) academic self-concept

    c. Psychological academic self-concept

    d. Academic Problem solving

No statistical difference was found in the total pre and post scores of students who used collaborative strategies (dyadic and peer-guided learning) to those who worked alone as a transitional tool into their 'A' level studies.
No statistical difference between academic self-concept and peer-guided, dyadic or autonomous learners for <u>verbal academic self-concept scores</u> was found where the null is retained.
No statistical difference between academic self-concept and peer-guided, dyadic or autonomous learners for <u>(generic) academic self-concept</u> where the null is retained.
A statistical difference between pre and post scores of <u>psychological academic self-concept</u> was significant at the 5% level of significance whereby the RQ_1 is partially accepted.
A statistical difference between pre and post scores of <u>academic problem solving</u> was significant at the 5% level of significance whereby the RQ_1 is partially accepted

Table 45 Findings for subsidiary research question 1

In terms of descriptive statistics,

2. Student self- assessments revealed dyadic learners offered a more positive evaluation than those studying alone.

3. The least positive evaluation came from the peer-guided groups.

4. Questions regarding academic confidence revealed peer-guided learners to be most positive.

5. Questions regarding academic effort revealed peer-guided learners to be most positive.

6. Word card analysis revealed collaborative learners (DL and PGL) to be more positive about their knowledge and understanding than autonomous learners.

7. Word card analysis revealed collaborative learners (DL and PGL) to be more positive about their study session experience than autonomous learners.

Results and discussion of subsidiary research question 2

SRQ_2 considered the relationship between academic self-concept and attainment in public examinations.

A Pearson Product Moment (PPM) correlation measured the strength of the relationship between two variables.

The co-variables were

    Difference in pre and post academic self-concept scores

    Attainment scores in AQA examinations (UMS)

Prior to calculating the correlation I decided to see if the data was normally distributed and took each variable separately as shown in the graphical representations below. The scores were reasonably well spread.
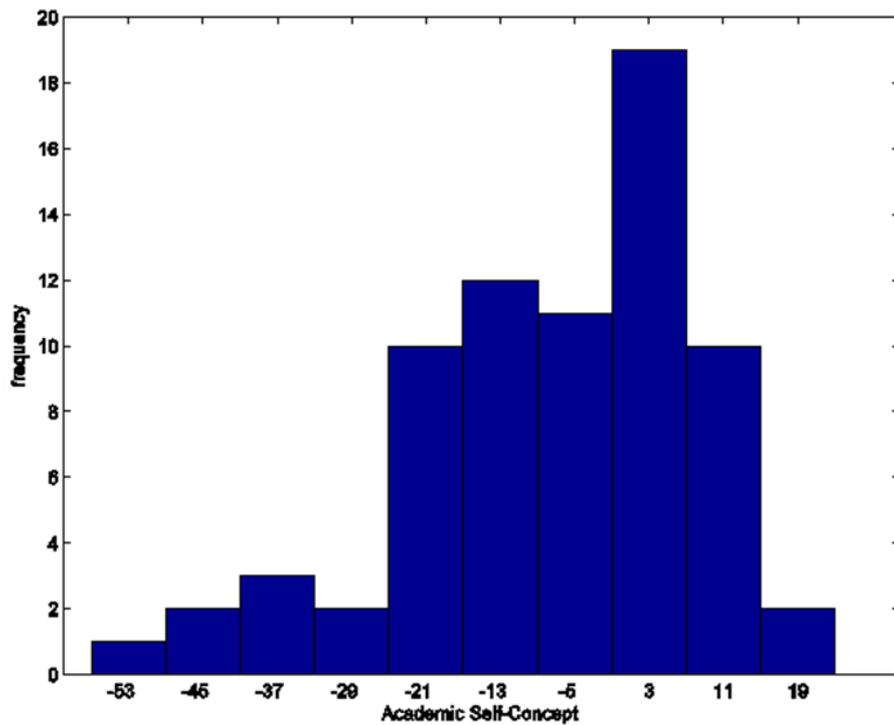
Figure 46 Distribution of academic self -concept scores
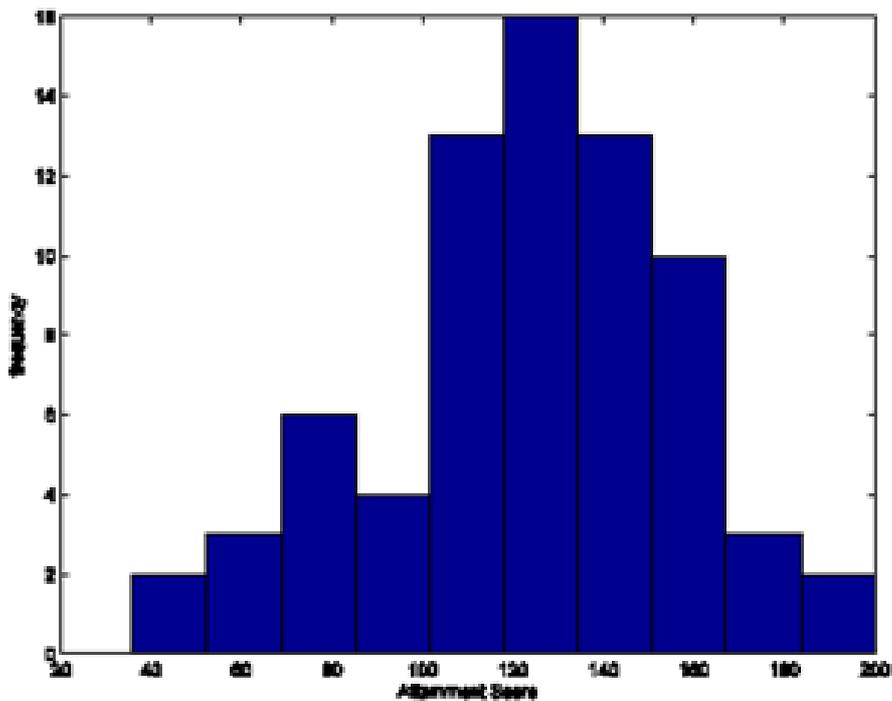
Figure 47 Distribution of attainment (UMS) scores

It was clear from the shape of the normal distribution of scores that there was a bell shaped curve around the mean scores. (Figure 46 and Figure 47). As a result of the normally distributed scores I decided to use a calculation using Pearson correlation between two variables in this case the students' academic attainment and their difference in academic self-concept scores. These scores revealed a correlation coefficient. This value can range from +1 to -1 where a positive score indicates a positive association or link between the two variables. The correlation coefficient found by assessing these two variables was $r = +0.2966$. This meant that a positive relationship was found between the difference in academic self-concept scores and attainment. As the score of academic self-concept rose so did the score attained in examinations.

The probability 'p' value affirmed the statistical relationship between the variables in this particular group of seventy-three students. Although the correlation coefficient revealed nothing about the relationship among a wider population, the sample was large enough to be recognised as adequate within education and psychology. The correlation coefficient and the 'p' value were calculated with a test of significance at 5%. This 'p' value indicated that for the seventy-three participants there was 95% certainty that there was a positive correlation between the two variables.

P value	0.011
Correlation coefficient	R =+0.2966
P=<0.05	A correlation co-efficient of 0.2966 is significant at the 5% level for 73 scores – so we can be 95% certain that there is correlation between the co-variables.

Table 48 Pearson Correlation Summary

A graphical representation as a scatterplot was generated to see the variation in individual scores. This illustrated a weak positive correlation between attainment and academic self-concept.
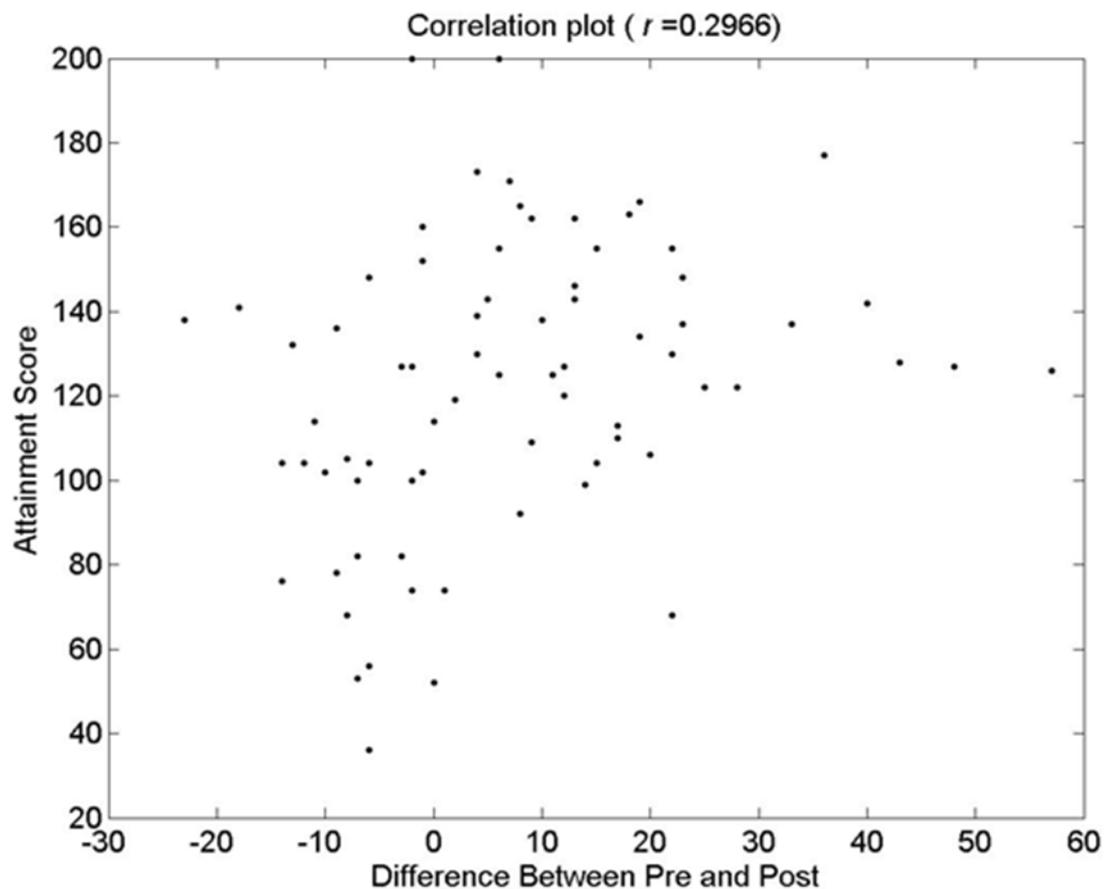
Figure 49 Correlation scatter plot

What this meant for the students in this study supported what was shown in the literature; that there seemed to be a reciprocal relationship between feeling good about a subject and achieving good grades. The difference between the pre and post scores of academic self-concept correlated positively with their 'A' level grade in UMS scores.

The findings of SRQ_2 supported the findings of Marsh (2007) and Hattie (1992) in which they argued the self-concept of the learner was a powerful psychological

construct that helped to explain students' varied behaviours, approaches and attitudes towards their studies. However Marsh (1990) recognised the relationship was complex and suggested the 'most vexing theoretical question is whether academic achievement influences academic self-concept or whether academic self-concept influences academic achievement?' (Marsh 1990, p. 646) Although other studies reported the opposite (Valentine *et al.,* (2004), it seemed that no one could resolve the issue of whether academic self-concept affected academic achievement or whether academic achievement affected academic self-concept (Byrne, 1996; Hattie, 1992).

This brings to a close the presentation of quantitative and qualitative findings and before I begin with a discussion I would like to review the chapters so far.

Summary of chapters:

In chapter one I introduced the idea that collaborative study skills may influence a student's academic self-concept. I explained how the problems of transitioning students were evident within schools, the workplace and further education. It seemed that sixth-form education failed to prepare students for their future as independent individuals, and teachers, parents and students were aware of the problems of drop-out rates, low PISA results and a failure of students to feel happy and supported in their sixth-form. A view of the theoretical foundations upon which learning and knowledge is constructed was explained and reference was made to the social constructivist framework upon which this study is built. The aim of the study was to investigate educative approaches that might ease the experience of learners from a GCSE information environment who were transitioning into a broader skill based environment where the expectations were that students become independent thinkers and learners. The focus of the study investigated three contexts of study skills as a transitional intervention and compared students' academic self-concept with actual attainment scores in public examinations.

In the second part of this chapter I explained how through the lens of social constructivism within an educational context, learning and knowledge are bound. In parallel, an in-depth analysis of the psychological construct 'academic self-concept' was discussed along with its history and relationship to academic attainment.

Chapter two was devoted to the details of the mixed methods study. The merging of quantitative and qualitative methods in a concurrent triangulation was clearly established. Each particular piece in the jigsaw of data collection was chosen and

developed as an instrument to be fit for purpose. As an example, video evidence illustrated how the students conversed whilst in their study session, which then informed semi-structured interviews, which in turn informed 'structured eaves dropping'. Led by Freeman (2009) and the evidence from qualitative revelations of the students' transitioning experience, a number of themes emerged. These included the relevance of humour and banter in an informal learning environment as well as the value of others in growing their understanding and developing their academic self-concept.

The numerical data were explained in the second part of this chapter. Dividing quantitative and qualitative was to focus on the individual strength of each method chosen as fit for purpose. Quantitative analysis included inferential and descriptive statistical analysis determining the significance of the difference between academic self-concept and the collaborative study skills chosen by the transitioning students (SRQ_1) and a positive relationship between academic self-concept and academic attainment (SRQ_2) was shown. These two subsidiary research questions were examined in terms of statistical significance using both types of data.

In this next chapter a discussion of the findings in relation to the social constructivist framework is offered. It combined the emergent themes and discussions from previous chapters and collated the findings together. Hammersley (1996) referred to a mixed methodology as a type of multi-strategy approach as 'complementarity'. This dovetailing with differing strengths of both quantitative and qualitative approaches was discussed and presented as fully merged and dovetailed.

Chapter 4

Discussion

Introduction to discussion

'If you wish to know the mind of a man, listen to his words'- Chinese proverb.

This chapter reviews the aim and findings of this exploration into the transitional experiences of post-16 students. I aimed to uncover whether students' academic self-concept was affected by working collaboratively during their transition from a teacher-led environment to 'A' level independent study. Although from a qualitative perspective students reported differences, quantitative data revealed little significant statistical difference between autonomous learners (AL), dyadic learners (DL), or peer-guided learners, (PGL).

Additionally I explored the relationship between academic self-concept and academic attainment. Mirroring the findings from researchers in the field of self-concept, (Marsh, 2007; Hattie, 2004) both quantitative and qualitative data supported the increase in academic self-concept over a nine-month transition. Students felt more positive about their knowledge of psychology, academic problem solving and verbal academic self-concept. A statistically significant positive correlation was shown between academic self-concept and attainment levels.

This discussion merges data from quantitative and qualitative sources as well as merging findings from both research questions. This discussion included an evaluation of academic self-concept and how far mixed methods and a social constructivist framework for the study interpreted the students' experiences. Firstly I review the aim of the study.

Review

This study examined in depth students' transitioning experiences and provided a unique and detailed insight. The dovetailing and use of mixed methods enabled this. Beyer and Apple (1988) suggested the type of research conducted by teacher-researchers created meaningful curriculum reform. With a dual role I am 'most intimately connected with the lives of students, teachers, administrators… and community members whose work in schools aids the process of genuinely transforming educational practice' (Beyer and Apple 1988, p. 6). Whilst this stance is not without its ethical tensions I have discussed the dichotomy throughout this thesis.

I restate the main and subsidiary research questions here to enable the reader to consider the discussion of the related findings.

Main research question:

What happens when a transitional intervention is used, such as a collaborative learning strategy, with students studying psychology and ethics 'A' level for the first time and is there any impact on their academic self-concept and attainment?

The subsidiary research questions are:

SRQ$_1$. Is there a difference in the academic self-concept of adolescents who use collaborative learning strategies and those who use autonomous learning strategies?

SRQ$_2$. Is there a positive correlation between academic self-concept and academic achievement?

Naturally occurring talk

A major difficulty in data collection of personal and meaningful responses was the students' awareness of being studied. Psychologists know this as 'participant reactivity'. Students may react in a variety of ways, which has an effect on the realness of the findings. Rosnow and Rosenthal (1996) suggested a number of possible roles that a participant might play e.g.; a 'good' or 'helpful' participant; as well as the 'apprehensive', 'faithful', 'honest', 'suspicious' or 'antagonistic'.

Despite these potential inherent variations when posing personal questions regarding their study skills, the students' responses were valuable in providing clarification. As a reminder for the reader the two questions were:

- Describe how the study session has affected your knowledge and understanding of psychology?
- How do you feel about your study sessions?

Informed by Freeman's (2009) data collection from a social constructivist perspective rich examples of students' understanding became evident. In order to illustrate this point I used a conversation from the group interview where students discussed the features of my research methods and the relevance of their invitation to share their views and experiences. Silverman (2001) noted that in order to try to analyse talk, such as with conversational analysis, even the laughter was a statement of great value. Laughter according to researchers is a highly organised non-linguistic act and is subject to the 'same kind of ordering' as linguistic elements (Holt, 2012). Here students discussed the relevance of the group interview (for transcript see Figure 76).

251

P36:   She is going to make notes, recording it and writing down what we say…

P24:   Why?

P36:   She thinks we might change what we say when she interviewed us…

ALL: [Laughs]

P7: Yeh totally…I did that interview, [refers to interview] did you have one… did you? I told her what it was really like, no point messing it up, I told her what it was really like?

This excerpt of conversation was of interest, as the students were all amused in response to participant reactivity. This may have been because they had all adapted their responses or alternatively they had all told the truth. The statement made by 'P7' confirmed the meaning of the laughter. She affirmed she had been honest and the laughter suggested they had no need to change their behaviour or adapt their responses for my benefit. In this way the conversational analysis of such a small element of a group discussion increased the validity of the analysis, as the participants appeared not to be adapting their responses and behaviour because of me.

I suggest this served to illustrate the students' honesty in their discussions. They valued the opportunity to reflect on their learning experiences and certainly 'P7' felt it appropriate to be frank suggesting their responses were not biased by participant reactivity. As the participants were clearly all known to me, it is therefore my interpretation that their responses were genuine. Informed by Tashakkori and Teddlie (1998), I provided the 'participants with information regarding the importance of the research, appealing to their sense of altruism and creating a sense of professional trust reduced the possibility of intentional

misinformation' (Tashakkori and Teddlie, 1998, p. 96). Despite these potential cautions I was confident with the realness of students' responses.

Themes from the findings

A number of recurring themes emerged from a variety of data sets (including group and semi-structured interviews, video evidence and student recommendations). These were as follows:

- The importance of choice,
- Fun,
- Emotional wellbeing,
- Positive regard for others,
- Social identity and
- Academic self-concept.

These were summarised in the following diagram where I show dovetailing of qualitative and quantitative methods illuminating six themes in Figure 50. Although this schematic is really useful for the reader I would like to emphasise that this is still a simplification.
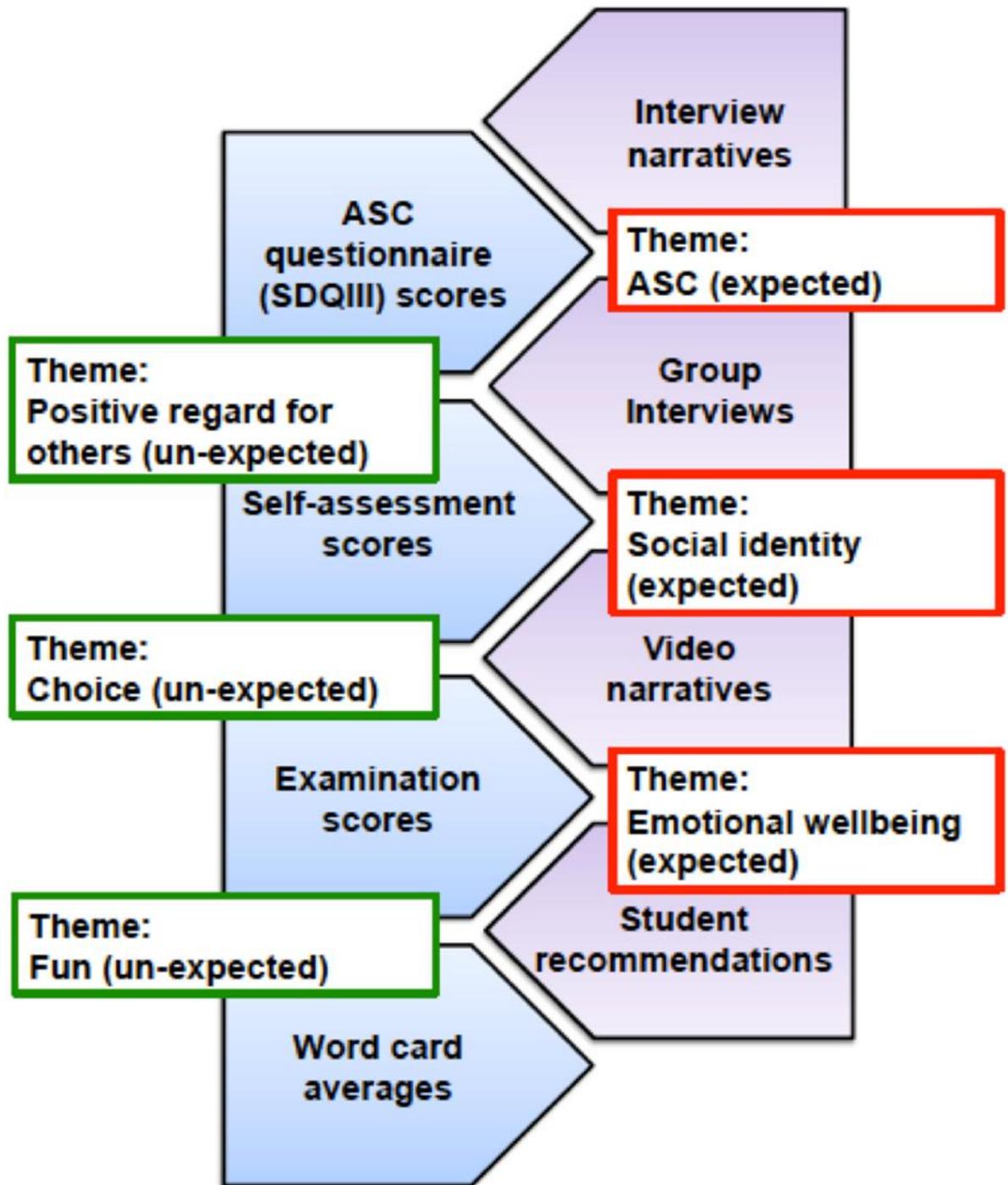
Figure 50: Dovetailing of methods illustrating themes

The six themes emerging from the qualitative and quantitative data revealed that some were more expected than others. (In an attempt to visually represent the interconnectedness, flow and dovetailing I offer here an alternative pictorial representation in (Appendix Figure 80). This also illustrates how the themes have been informed by particular methods.

I discussed these themes in this particular order:

Expected:

       Academic self-concept,

       Social identity,

       Emotional wellbeing.

Unexpected:

       Positive regard for others,

       Choice,

       Fun.

Theme: Students' academic self-concept

Academic self-concept and achievement relationship

My study has shown that academic self-concept scores increased over the duration of the 'AS' course. This meant that a positive relationship was found between the difference in academic self-concept scores and attainment. This mirrored House (1993) who examined the relationship among five areas of academic self-concept and the academic achievement of the students at the start of their studies, following their enrolment status at a university for four years. As in this study, academic self-concept seemed to be one of the most important factors that determined whether students continued in school or not. As House (1993) suggested, when their academic self-concepts were negative students were more likely to drop out of school, thus indicating the importance of academic self-concept in an academic setting. My findings also support Tang (2011) who found academic achievement was 'strongly impacted' by academic self-concept in students progressing from first through to third year (Tang, 2011, p. 123).

This study did not use academic achievement to predict academic self-concept, but some literature did. Cokley (2000) found that a student's grade point average was the best predictor of academic self-concept for African American college students who were attending predominantly white colleges and universities. Although contemporary research is mixed, it seemed that no one could resolve the issue of whether academic self-concept affects academic achievement or whether academic achievement affects academic self-concept (Byrne, 1996; Hattie, 1992). Despite the conflicting views on causality, I suggest that academic self-concept could still be a useful predictive tool in post-16 education. Students

might be encouraged to complete the SDQ-III questionnaire followed up with a conversation with a learning tutor. This conversation regarding academic self-concept and self-regulatory strategies could increase a student's awareness resulting in increased academic effort perhaps and engagement in study skills that would appeal to them.

The quantitative findings of SRQ2, which considered the relationship between academic self-concept and attainment in public examinations, supported the findings of Marsh (2007) and Hattie (1992). They argued a learners' self-concept was a powerful psychological construct that helped to explain students' varied behaviours, approaches and attitudes towards their studies and their increase in academic attainment. My data confirmed that students' academic self-concept was significantly enhanced in terms of competence. Their examination results improved, and this relationship was statistically significant as well as qualitatively significant.

Academic self-concept

In chapter 1, I discussed the details of self-concept. Marsh *et al.,* (1988) explained this as not the facts about one-self, but instead what one believed to be true about one-self. Knowing this, the comprehensive definition borrowed to assist this study was Mercer's successful definition of academic self-concept reiterated here:

> 'Academic self-concept is thus an individual's self-perception of competence and their related self-evaluative judgements in the academic domain' (Mercer, 2011, p.14).

Hattie's rope analogy for students' self-identity was useful too: a combination of strands (self-verification and self-protection), yarns (uncertain personal control, fear of failure and anxiety), and fibres (self-regulatory defence mechanisms, self-comparison and monitoring strategies) emerged throughout the narratives discussed below.

Using Hattie's rope analogy, I listened to how 'taut' some of the students' 'ropes' were and, listening to others who were struggling, I saw quite clearly how 'loosely' their self-concept rope was and his theory began to make a great deal of sense.

Sixth-formers employed a multitude of dispositions depending on the need to protect their self and self-esteem. Hattie identified self-handicapping, defence mechanisms, social comparison and self-monitoring as fibres. All of these were identified as strategies my participants reflected upon. Similarly Hattie referred to his 'yarns' as situation specific orientations such as uncertain personal control, fear of failure and anxiety. These too were identified in the study. Finally the strands such as self-verification, self-enhancement and self-protection all twisted together to create our 'very being/life/existence/who we are/self-concept/self-identity' (Hattie, 2004). These features were illustrated by some conversations extracts:

> P7 (PGL) 'Well, what **did** we do…I don't think it worked that well…we got distracted a bit too much' (Yarns).

> P29 (PGL) 'Otherwise you have to end up doing it on your own.. or wanting to be on your own…' (Strands).

P29 (PGL) 'I mean it did help towards developing friendships and things like that and getting in a group, but when it came to like actually doing the work and stuff it actually didn't help at all...it would have been easier if it was a smaller group'… (Fibres).

P7 (PGL) 'Yes but I think if you do revise with other people and if you don't 100% get it you may end up brushing over it and you say like Oh that will be right…' (Yarns).

P36 (AL) 'coz if you are on your own you are more likely to go in depth into it' (Fibres).

Hattie's theories had personal significance for me too and I began to notice how my own academic self-concept resonated with the rope analogy. I clearly identified with the students on a personal level, as my own self-concept was often quite 'loose'. Mirroring the students, I was also transitioning into a new world of academic research and this was difficult for me too. I found that my academic self-concept for certain academic tasks was challenged. Transitioning into doctoral study left me isolated and I realised how the students must have been feeling. However, as 'P36' explained in her quote above, once I had carefully considered what and how to write my thesis, it was easier to lock myself away alone with my thoughts. So as Campbell (2000) suggested maybe we do adapt and change like driving on a motorway, adapt to the hazards ahead and then negotiate around the other road users.

The findings from my study revealed a statistically significant positive correlation of $r = +0.299$ between academic self-concept and achievement. This confirmed research discussed in the second part of chapter 1, where Marsh (1990) and Marsh *et al.,* (2006) established improved academic self-concept led to increased academic achievement. Many recent studies have suggested

reciprocal relationships between academic self-concept, learning strategies and academic achievement (McInerney *et al.*, 2012). Academics therefore had a vested interest in any effective intervention, with predictive realism, that has the potential to increase students' academic self-concept and enable them to be more resilient and academically buoyant (Martin, 2012), although some cultural differences may exist (Chiu and Klassen (2010). One student; 'P42' (DL) explained that the collaboration helped her to feel more confident and competent:

> P42: 'Probably by going over something I don't understand and it helped remember a lot more'

This resilience may in turn positively impact on the students' transition from being a GCSE learner to an 'A' level learner. An effective transitional intervention that 'bridged several gaps' (Hibbert, 2001, p. 43) from GCSE learning to post -16 could prove invaluable in terms of student achievement and wellbeing.

However, academic self-concept is altogether an elusive idea. The relationship may be reciprocal with attainment affecting academic self-concept (Hamachek, 1995), meaning one tended to feed the other. Those students who did well tended to develop a positive academic self-concept mirrored by those students with a positive academic self-concept having the self-belief that they could succeed, which gave them the desire, motivation and confidence to work hard at success. Students had to do well in school in order to have a positive self-concept about their academic ability, and a positive self-concept was a necessary pre-requisite for doing well in school. This study confirmed the statistical significance of this relationship, whatever the direction of causality.

Similarly those who struggled to grasp the subject or grasp the concept of independent study at post-16 had a less positive self-belief and view of their future success potential i.e. a lesser academic self-concept. An autonomous learner stated in her study session she felt confused and this made her feel less confident, explaining when she was alone she often did not understand the instructions and was unable to proceed by herself:

> P17 (AL): 'Yes I think so… as well as the reading… I didn't know what 'SIT' and 'CI' meant on your lists [makes reference to a printed sheet from me] so …and all of the other abbreviations…. and so I was confused and frustrated'

One of the drawbacks with working alone was the lack of any one to confirm you were doing the right thing. Student 'P17' was unable to progress with her self-directed study and criticised the sheet rather than seek help. A feature perhaps of a student needing more help in study skills and a further example of Hattie's self-handicapping and defence mechanism fibres. I could understand her frustration not only as her teacher who had designed the sheet, but also as a teacher transitioning into the role of researcher. I often, as my students did, felt alone and unable to progress without knowing in which direction I should direct my studies to achieve the most effective outcome.

The issue is of causal ordering i.e. academic self-concept causes subsequent changes in academic achievement (Marsh *et al.,* 2005) but also the reverse was suggested in the reciprocal effects model (Marsh and Yeung, 1997). Thus referring to academic self-concept as an elusive concept may in fact be accurate, as causality remains an unsettled issue in academic research (McInerney *et al.*, 2012) as well as in this study. The reasons for uneven academic self-concept

and attainment scores have puzzled parents and teachers and indeed students. Research has looked into the evidence for causal effects of motivational beliefs on attainment as well as the subsequent academic self-concept beliefs leading to higher grades and reported mixed findings. Marsh (1990) proposed a causal effect of academic self-concept over attainment with a large sample of adolescents in transition with sound methodology. In a review Marsh *et al.* (1999) he argued a more realistic compromise would be the reciprocal effects model. Here prior academic self-concept affects subsequent achievement and prior achievement affects subsequent academic self-concept.

Rosen *et al.,* (2010), in their review of academic self-concept literature confirmed, however, the overwhelmingly positive relationship between academic self-concept and academic performance. Students in this study showed a clear increase in psychological academic self-concept over time. This meant that their perception of knowledge and understanding improved significantly from the beginning of their studies to the end of their course. I had expected students to have a higher academic self-concept in the post test and imagined this was what every teacher aspired to see in their developing students. These findings were above the probability found by chance. To illuminate this I would like to use a quotation from 'P11' a (DL) learner who illustrated a positive academic self-concept:

> P11: **'**For me – being able to discuss it 'coz the best way is to TELL others and it makes me feel I've got it more, to discuss it with others is great for me. Helps to motivate me to do more work and then start work, I then look forward more to the lesson and feel more motivated before the lesson'

Collaboration, however personal to the learners, strengthened their learning experience, made it more memorable and forged lasting relationships in a twelve-week transition. Their first ever experience of 'study' periods (often referred to as 'free' periods) may have helped some students to feel more a part of the learning experience, prepared them more for their examinations and more importantly increased their academic self-concept.

Interview data demonstrated that students valued the opportunity given to them through the investigation to focus on their learning, thinking meta-cognitively. 'P11' (DL) was quite aware of her study partner's difference in learning ability and preference; I considered them to be an unlikely pair, who were not familiar with each other prior to the pairing. She explained:

> 'It helped to talk to her about what she didn't understand and it helped to … by saying it out-loud... helped her to know what I was understanding better… if you know what I mean {consolidate?} yes that's the word consolidate. She thought I was better than she was and she asked me to explain the working model… she had some gaps it helped her [Do you think it helped her (name)?] – better for (name) 'coz she thinks she knows less and so it is good to have someone to build your self-confidence.'

The learners' self-concepts were also raised by reinforcement from their peers, their teachers and their parents, encouraged by their continued efforts when facing new sixth-form challenges. Students revealed how they found it useful to be in a dyad as it helped them to work through what they needed to know, as well as having the support of a MKO showing them the 'AS' knowledge was not insurmountable:

P33 (PGL) 'I feel that out of all of the subjects I feel I have understood and 'coz I am being supported it helps me to do well'

Further, when asked if the study session, together in a group, could have deepened her knowledge and understanding 'P33' replies:

'Reassuring – if they know what it is …they can explain it is nice to see and I like it when they say I don't understand I can explain it 'coz when you have to explain it to others it helps you to understand it better.' Definitely you are either struggling with somethin'… 'coz you can get someone to explain it in a different way, you revise it with the group and you understand the topic better.'

In terms of the stability of how self-concept changed, other studies using the SDQ (III) and ASDQ (III) measures found mixed evidence. Some suggested a significant decline throughout adolescence (De Fraine *et al.,* 2007) and some more stable and reliable (Guay *et al.,* 2003). The quantitative data supplied by this study showed that SDQIII scores increased over several months, although no statistically significant difference was found between the learning contexts of collaborative or autonomous.

Recent studies in secondary schools reported an association between school drop out and low academic wellbeing (Korhonen, Linnanmaki and Aunio, 2014). However despite the lack of a causal or reciprocal explanation some studies have illustrated how self-concept was more predictive of achivement (Guo, *et al.* 2016) whereas Marsh and Craven explain the theoretical 'chicken egg debate' (Marsh and Craven, 2006, p.147) as a more logical conclusion that prior self-concept affects subsequent achievement, and prior achievement affects subsequent self-concept. In this way I concur with Rosen (2010) who suggests

264

that as students felt more positive about their experiences in school, their friendships as well as their ability to perform well in subjects they chose, the more likely they were to persist with their studies and 'the less likely they are to drop out' (Rosen *et al.,* 2010, p.136).

Not only did students in this study report feeling more positive about their learning, some students reported a greater insight into their learning. Learning with a 'more knowledgeable other' gave an insight into the attitude and level of engagement needed at an advanced level of 'A' level study for Year 12. One student reported in the group interview:

> 'Yeh, like having it rephrased... It may then make it more understandable 'coz you have heard it 3 or 4 times and so like you haven't just heard just one person and the way they have said it….it might make it more understandable, the way they have said it.'

Individuals with different interests and perhaps different learning styles was noted by Frank (1986) in the first chapter who explained that using a variety of individuals in one group might allow broader and more diverse explanations. Some members of the group might also find different aspects of the task more important or interesting. I suggest this was the case; a 'mixed' group might serve to accentuate certain aspects of a topic, which was a useful meta-cognitive strategy for the group as a whole, thus increasing their academic self-concept. Interview evidence to support Hinsz (1990) 'more minds together' was found. A female student 'P7' espoused the wonders of peer learning for her as;

> P7; 'it is like having five different text books around you at the same time and they can all explain different things to you in their own different style and using their own examples and arms and legs!'

265

Mixing the year groups informally like this had a positive effect overall. Other schools have tried mixing year groups to great advantage: 'Year 12 can now see that being in the sixth-form 'isn't a doss' – they see their form mates doing applications, meeting deadlines and revising' (Shagen, Johnson and Simkin, 1996, p. 31).

The UK government has revamped the curriculum of all subjects so that, for example, Psychology 'A' level from September 2015 becomes a two- year course with final examinations after twenty-four months. With this reduced emphasis on examinations teachers could capitalise on a clear two years of teaching and learning and might like to try a peer-guided intervention to assist both age groups in their academic self-concept and embrace a MKO and a social constructivist framework for sixth-form study period learning. It certainly seemed to have been positively received by 'P7' (PGL) who explained:

> 'Yes it allows me not to have to read everything 'coz reading is not my strong point {dyslexia}… I like to watch a film with others like the 12 Angry Men and I like to bounce ideas and teaching each other and occasionally drop something into the conversation helps to keep it all alive.'

For years, as a teacher, I offered up my own 'free' periods and lunchtime slots for students to come and chat informally about psychology. These informal horizontally designed sessions attracted all year groups. Fuelled by juice and biscuits, the groups discussed psychological concepts broader than the confines of the curriculum. Email conversations and 'back-handed comments' from their siblings suggested that these sessions deepened the intrigue and love for the

subject such that study groups became a major feature in my timetable as I knew they benefitted not only the attendees but reinforced the qualitative findings of this study that knowledge is deepened by sharing and discussing. In these sessions I often acted as an MKO, but often a student researched an area and explained their in-depth understanding to their peers on a powerful horizontal level strengthening their academic self-concept.

Theme: Social identity

This theme was evident throughout the interviews and word card analysis, especially as students referred to 'their' group and 'their' content, and how 'their' study group friends were able to understand. Occasionally students referenced other groups in their video evidence. This social identity of the group confirmed students were taking their group seriously. Flum and Kaplan (2012) refer to this as 'interrelatedness'.

Supporting evidence from Wouters *et al.,* (2013) it seemed from the video and interview narrative that bonding and being a part of the group was crucial to the emotional cohesion and stability of the group, the individual student and their academic self-concept. In the video narratives two students who were taught in different psychology classes, discussed the class they were in, explaining the differences in groups and the different activities teachers had asked them to perform. One student mentioned some tensions with other students in the group and appeared not completely happy. Then she mentioned in 'week eight' how useful this session was for her:

> P14:   'I don't really like them who sit at the front…'

P13:   [looks up, interested]

P14:   'I like our Tuesday pee 4 slot though, I kind of look forward to it'

P13:   'yeh'.... [Smiles and confirms]

Crook (2013) reported the need for a place to learn and to see other people learning in 'togetherness'. This place where you learnt and the group with which you learnt helped to cement a cohesion and synergy. Andriessen, Pardijs and Baker (2013) referred to this in their paper entitled 'Getting On and Getting Along'. In a group interview 'P29' and 'P7' took part in a discussion regarding other groups and it was clear they considered their group to be better than the others…

P29: No…Yeh, 'coz I thought …didn't we originally have a couple of us and the 3 of us and we just end up saying right yeh… shut up… like (name) and (name) wanted to a group on their own, but then he came once and he told him not to come because we were already like a good group.

P7: Yeh, like me and (name) and then (name) and (name) came … did (name) stay with us?

P29: He came once and we told (name) off the whole time.

Similarly in the video evidence one dyad always brought biscuits or sweets for their study group. They relished this, as one slowly pulled out a packet of chocolate biscuits from her bag: 'guess what I have for us today'. The biscuits, sweets or laying out the space differently (as one student explained to her friend 'just how I like it') showed the students were beginning to take ownership of their space and trying to enjoy the experience. This mirrored Rogers (1967) who suggested 'students feel deeply appreciative when they are simply understood-not evaluated, not judged, simply understood from their own point of view, not the teachers' (Rogers, 1967, p. 304-311).

It is also worth noting here in terms of group identities, that there were no gender differences evident in the makeup of the study groups. Gender differences in the literature have been illuminating. Swann (1992) showed how the different interactive styles for primary boys and girls influenced the ways knowledge is constructed and thus affect the learning experience. This finding showed that although personality and individual differences accounted for variations, male students tended to dominate discussions and made executive decisions in problem solving tasks. Contrary to this finding, interview data from college 'A' indicated that females generated considerable confidence when they worked in multi- gender groups;

> P24 (male student) '...but like you said earlier [pointing to female student] when I get a bit stuck you always seem to come to the rescue and I find when I am with other people doing it [revision] I find I get more out of it'. P36 (female student) ' yeh… I know, I don't mind working in a group as long as we are all doing it properly [revision]'

Theme: Emotional wellbeing

Positive emotions and experiences during a transition period were more likely to signal flourishing students who were less likely to yield to attrition from the course and negative thinking about their sixth-form experience. Research into positive psychology from Seligman and Csikszentmihalyi (2000) showed that positive emotions served as markers of flourishing and optimal wellbeing. This theme emerged from the findings of the present study. Students mentioned many positive emotions such as joy or interest, contentment, pride or even love. Even though experiences were not always productive, students tended to value their time together knowing they were 'all in it together' and it became evident

that others felt similarly. The importance of emotional wellbeing and positive experiences as long lasting effects on learning and constructing meaning have been moving and pivotal. A male student reported this was of great importance to him, not only as a learner, but also as a member of a sixth-form community trying to cope with the demands of a new experience:

> P24 (PGL): 'Is it hard for you to focus on your own.. ? But is it easier to do it with others? But there is another side to it where you can sit and chat, but in our study session, we managed to get a bit of both done – a bit of a chat and then we did get the work done at the end of the day'

In researching other schools and colleges, it was evident that advice on heir websites for sixth-formers worried about 'fitting in' and making friends was abundant. The message was clear throughout, 'there will be lots of group work at 'A'-level, so you'll naturally mix with others. Once you've got chatting in class, you can develop new friendships from there, perhaps by suggesting meeting up in free periods or at lunchtime, whether to study together or to have a coffee' (Oxford Royal Academy, 2015, p.1). My study revealed that adolescent students became effective learners with a positive academic self-concept when they received authentic and directive feedback, assistance and emotional support. Student 'P33' explained:

> P33: 'Really good, at times not always productive, working with someone who understands and you connect with them, I wasn't nervous at all.'

This 'zone of emotional development', to which Holzman (2009) referred could have been one of the benefits of a study group, especially guided by a peer who was knowledgeable. Student 'P33' confirmed this later with her comment:

P33:'I feel that out of all of the subjects I feel I have understood and 'coz I am being supported it helps me to do well.'

In chapter 1, I suggested that learning together might reduce students' feelings of isolation, forging social contacts, bridging the gap to maturity and realising they had 'more to gain than to lose', Marra *et al.*, (2009). An improved self-concept may result in less attrition at a new college, as Yorke and Thomas (2003) suggested, the student was less likely to be lonely and alienated and more likely to persist with his/her studies. Indeed my interview data supported these findings. The more students felt they belonged to a community of learners, the less likely they were to let each other down. They referred to their positive experiences and thus succeeded through a positive self-concept. A student who felt she was 'shy' highlighted this. She explained how coming to college was 'hard' and she found it difficult 'as making friends was not easy'. She joined a PGL group and stated it helped her 'not to feel as negatively about college':

P33: 'I felt better about myself – if I was productive it made me a little encouraged and happy, Supported… nice better about coming to college and I don't want to come if I know others like me are struggling I don't think we had a bad session… you do wonder though that when it is done that you haven't put as much input and you've said something wrong it doesn't matter, things that we…you could go over next time, for example you can ask questions to each other'.

'P33' illustrated her warmth and security being a member of the group. Being in a community of learners may be achieved relatively simply by using a smart-phone. Although it may seem superficial to be a member on a 'group chat', this may be one of the factors that defined that students' identity, and may be more

significant than it seemed. Participating in such a conversation could certainly have made the student feel more like an accepted member of the group forging cohesion.

Such technologies also provided collaborating students with a means of attachment and improving emotional wellbeing. A heightened sense of emotional wellbeing and social cohesion was established between present and absent students, who missed a lesson. When they collaborated in a group chat with their friends and 'got up to date' this assisted their identity as a learner. Teachers and academics should not underestimate such a seemingly superficial level of belonging or emotional support in such an onerous transition period.

In a private email correspondence a department leader at a London university wrote 'we have not timetabled peer-assisted learning for the past 3 years as we have noticed that students had developed a peer assisted culture of their own with the use of 'Facebook' etc'. J. Hammond (personal communication, July 16, 2012) he concluded 'if we start to intervene again we might destroy the work that has started.'

I tend to agree; collaborative learning and emotional wellbeing could be achieved using technology. The importance of platforms such as smart-phones to students of the 21st Century is the ability to facilitate immediate communication. 'Snap chat' messaging tools ensured contact was retained and using 'Facebook messenger' 'group chats' enabled students to keep in touch. From the video narratives it was clear students tended to ask each other about various pieces of work and found it useful for confirming deadlines etc. However useful the messaging services may be, the most important thing for me about collaborative

learning was that it promoted higher level dialogue (articulating ideas, resolving differences, building on ideas, high level interaction, engagement mutuality and interdependence) although I fear the I-phone (although I may be accused of being a luddite) may not be the complete solution.

My data suggested students felt emotionally supported confirming Ladyshewsky (2000). As well as feeling socially and emotionally supported, they also felt academically aided which resulted in some students feeling more able to continue with the course and less inclined to contemplate 'dropping out'. Knowing that other people were also finding sixth-form hard, knowing that others were struggling to find confidence in the common room and knowing that others were nervous of certain teachers were all issues raised within the study sessions. From the video narrative, a PGL group spent over 35 minutes discussing the common room during a study session. They talked animatedly about the seating arrangements, they talked about the upper and lower sixth divide and were eager to chat further until the guide (their MKO) suggested they might do some work. There were, however, clearly still un-addressed issues that were of concern:

    Guide: 'we *should* get on…'
    P10:   'You're as bad as us… why are they so bitchy to us?'
    P24:   'Yeh, like cats'
    Guide: 'I don't know, some are just like that…'

Inspired by Vygotsky (1978), Holzman (2009) referred to one of the benefits of this social constructivist style of learning as the 'zone of emotional development'. I can only agree with Gray *et al.,* (2011) who suggested the factors that contributed to making a school or college 'academically effective are not the

same ones that make it a 'supportive' institution' (Gray, 2012, p. 30). The UK Department of Education regarded emotional development and stability as such a significant factor, that a recent report suggested small group work and classroom practices should be used to encourage positive social communications (DfE, 2015).

It is also worth noting here that the seating arrangements I designed for the peer-guided learning groups were also relevant. The 'round' table, which was significantly different from any other room in the school, facilitated equality. The guide sat among the others, engaging the group in Socratic dialogue. This round table sent a message to all members that all ideas were equally considered, and that discussion and contributions of all members were equally valued. I am sure it also had a positive impact on the cohesion of the group having an affect on their wellbeing and positive regard for others.

Theme: The positive regard for others

In an experimental study Gergen (1965) asked participants to talk openly about themselves and were then either positively or negatively treated. The participants who had been treated positively by another were shown to have an increased self-esteem over the negative and control conditions. These types of investigations revealed the strength of impact others had in shaping our view of ourselves. Gergen (1996) wrote 'then, an individuals' self-esteem can be shaped from moment to moment by others' (Gergen, 1996, p. 2). In terms of real life classroom experiences every teacher in any classroom could report the effects of positive regard by others and of course how positive peer regard, teacher reinforcement and self-belief were powerful tools to boost student self-esteem.

The effects of others' positive regard was seen in the present study where group members and even the guide gave encouragement and hope to students who were finding the transition difficult. Video evidence revealed MKO's sharing their revision 'cheatie cards' with the group, hoping to give comfort to the students that the tasks were not that onerous. Similarly, upper sixth students who acted as support on the information evening, brought their 'AS' files to show students what they did. This was remembered in a dyad group where 'P13' and 'P14' were discussing their notes, and mentioned theirs 'were going to be like that girl we talked to on the evening thing'.

This became a common theme throughout my study; the value that others placed on an individual reflected their own positive regard not only as a person but also as an academic:

> P24 (PGL) explained and posed questions to himself…
> 'Is it hard for you to focus on your own …but is it easier to do it with others?'

The need for some students to work with only people they liked was revealed in a group interview. A male student 'P24' began the conversation by explaining he needed to work with people he particularly liked and trusted:

> P24: 'Yeh, It could be also ….you are with your friends then maybe it goes better, if you are with your friends then may be it goes better.. if you don't know… or like… them and you are put in a situation with...'
> P7: (female) 'Yeh right those who don't do Psychology.'

P24: (male) 'Yeh, You have to feel like comfortable and confident because if you don't and nobody makes any contribution….with them, you don't want to be awkward yeh that one…'

P7: (female) 'Otherwise you have to end up doing it on your own…. or wanting to be on your own…'

This student's notion of a successful group was that selected on the basis of friendship and trust, noted in the first chapter, Martin and Edwards (1988) saw this peer selection as one of the overwhelming benefits to successful collaboration.

The notion of students wanting to be *with* others, but not all acting similarly, reflected the idea of the 'social animal'. Students who enjoyed congregating in a shared environment, and relished shared experiences 'without intentional communication of that sharing but as something inferred from the relationship of others to corporate identity' (Crook, 2013, p.47). These findings echoed in interview analysis where a student reflected 'it felt as though I was making a big effort to work' when they made it at least to the 'chatty side of the library' where they could be on show with other students, work alongside them but not be completely wasting their time (Participant PGL, P24). He noted the benefits to feeling a part of a group but also valued as a contributor, which in turn had a very positive effect on him and his peers. He explained:

P24: 'But there is another side to it where you can sit and chat, but in our study session, we managed to get a bit of both done – a bit of a chat and then we did get the work done at the end of the day. Sometimes I went to the chatty side of the library where I felt not completely on my own and felt at least I was having a go at some of my work and that made me feel better…'

Evidence collected via interviews and word cards supported this premise. It seemed that having it explained to you by a 'More Knowledgeable Other' (MKO) moved the student into the zone of proximal development. Receiving support from those who had already experienced the course and had 'lived through' 'AS' just a year ago was valued. This supported previous findings that 'entry level' students value personal contact with those who have recently transitioned (Briggs *et al.,* 2012).

Positive feelings of working with others and receiving positive regard were often verbalised. Admiring each other's statistics revision and mind maps, video narrative revealed 6 minutes of 'oh that's nice, and 'I like that' etc. However, other types of narrative might be important in changing a students' behaviour. Students held internal conversations, which contained voices and opinions. These voices and opinions were often shaped by what we imagined others to think. Gergen (2001) referred to these as 'social ghosts'. Our adapted behaviour tended to fall in line with what others would have found acceptable. In this way students decided that they were going to make their study session work regardless of whether it was effective. An autonomous learner was keen to work alone as she 'would have been distracted by others' and would not have been as strict with herself and as rigorous in her studies:

> P36 '... if it was a study you hadn't covered in class that would deepen your knowledge…– say if you didn't know about the cognitive interview and … anyway I prefer to write something down not just read it**.'**

This student was true to herself and seemed to ignore her 'social ghosts'. An interesting variation in learning was illustrated by two students who worked quietly and pensively alongside each other, needing each other's company but

not needing to verbalise their learning and this is described in the subsection 'between the cracks of learning' on page 286.

The value placed on others in the learning experience highlighted the value of a social constructivist educational process. This was not a new idea, in fact Socrates involved all of his students in a thinking and discursive process. The study therefore supported the social constructivist approach to learning pioneered by such researchers and theorists as Vygotsky (1978); Rogoff (1998); Tudge, Winterhoff, and Hogan (1996); Hinsz (1990). The process of working out how you were wrong and also explaining to others how you were right generated a shared understanding; this moved all of the members of the group into a higher level of understanding or zone of proximal development. This was reported by dyads and peer-guided groups in college 'A' when students seemed pleased to announce 'Oh I get it now', and one guide explained 'now that we all get that… shall we move on?' For Vygotsky (1978) the articulation of ideas was central to learning and development, when he observed children moving to the 'next' or 'proximal' level they rarely achieved that on their own; 'Oh, I get it now' is a clear example of moving their learning to the next level.

Working with others and making collaboration work requires social skills. In chapter 1, I reported UNICEF (2007); DfE (2014); Boud *et al.*, (2001) all had concerns and proposed action linked to communication skills. However employers also noticed the lack of skill. Prospects (2013) reported an urgent need for employees to be adept at group work, problem solving and teamwork. Improving students' social skills such as cooperating, listening to each other, questioning and turn taking in conversations improved learning by enhancing social interaction. This social interaction gave rise to better learning (Vygotsky,

1978, Bandura, 1997) and minimised disruptions or potential feelings of anxiety and isolation and thus had an indirect effect on students' grades. Student 'P33' (PGL) reported for example feeling supported by the group which allowed her to feel more positive about 'A' level study:

> P33: 'it made me a little encouraged and happy, supported… nice better about coming to college and I don't want to come if I know others like me are struggling.'

Theme: Choice regarding study methods

At GCSE stage education most of the students' experiences of learning have been didactic and teacher led, and with few opportunities for collaboration. When reflecting on their post-16 lessons they fondly reported lessons where they could experiment with ideas, where lessons were less rigidly structured and they were allowed to find their own solutions. Knowing how to study and the choice they made was informed by peer influence, past experiences and how they 'felt' it could work.

Students proposed they might have found it easier to assess whether a particular mode of study was likely to have any value to them by trialing options first. This supports findings in college students Chen, Chiu and Wang (2015) who reported students who selected the best learning approaches improved their academic performance and academic self-concept. In principle this seemed like an excellent recommendation however, in practice I wonder whether asking students to trial a handful of study contexts would be a realistic suggestion. With reference to Glasser's choice theory (2001) and getting groups of 'learning teams' together, students made a choice for themselves rather than submit to

external influences. Allowing students this opportunity to make a choice enabled them to make an informed decision not only about how they wanted to spend their time but what they did not want to do. I tried this many times, advertising revision sessions as active/formal lecture/informal discussion/Q & A/clinic and students chose to opt for the sessions which appealed most. Similarly dozens of teaching websites suggested empowering students to take charge of their learning with a number of dynamic strategies (Haynes, 2015).

Students in this investigation showed empowerment and used their study sessions well. When asked whether they thought there were any benefits to working with others or alone they showed remarkable insight into their learning:

> P24: (PGL) Getting it done 'coz I have no motivation at home and not much better here or in the library and helps you to help you get it …'

> P11: (DL) 'For me – being able to discuss it 'coz the best way is to TELL others and it makes me feel I've got it more, to discuss it with others is great   for me. Helps to motivate me to do more work and then start work, I then look forward more to the lesson and feel more motivated before the lesson.'

> P36: (AL) 'It tests my own knowledge and then I know what I have to find out, research it if I don't know it.'

The element of choice allowed students to form groups, which they thought would be of most benefit. 'Stronger students find it need-fulfilling to help the weaker ones' … the weaker ones find it need-fulfilling to contribute as much as they can… when they worked alone, a little effort got them nowhere' (Glasser, 2001, p. 81).

In this study, students were free to change learning contexts if they felt it was of no use to them. This, however, did not happen. Once a decision was made and a room was block booked for a time slot over several weeks, then all students seemed to adhere to their plan. It may have been easier for them to stay in the group and not change rather than make additional effort in forming a new group.

The predetermined timetable slots may have been a confounding variable that affected a choice. It is possible that the forced element of the timetable or indeed apathy towards changing the time slots created a barrier to full engagement. This issue is difficult to ignore, although it is not clear if this structural and logistical factor inhibited a change. It was, however, noted in one of the conversations in a peer-guided session that some of the other groups were not as successful. This perhaps served to accentuate to the students that combined effort was what made the group a success, not any external forces. This comparison perhaps focused the group to understand the value of their sessions and invest in making it increasingly effective.

In an interview one student illustrated how important the session was for her such that she had actively encouraged her friend to join and knew that she would find it beneficial;

> P7: (PGL) '…it was less formal and get a coffee and was great bounce ideas off each other...(name) said that… that **this** [PGL] gives a deeper insight and deeper understanding to the topic. In a group you all think differently and it wouldn't be the same if it was just 2 people and get loads of people's points of view if they are wrong it makes you think more about why it is wrong and how you can back yourself up with the right back up.'

Quantitative evidence, however, revealed one of the more surprising findings. The peer-guided group felt the least positive about their study session experiences. This could be explained in many ways however, upon reflection, and of course having had conversations with the 'guides', this may have simply been due to personality differences and the group dynamics of the students.

The guides on the whole reflected positively on their experiences, although this data was not officially collected. Most guides mentioned their understanding of psychology, albeit at an 'AS' level, seemed to deepen, confirming a range of research with mentors and guides (Budge, 2006); (Hill and Reddy, 2007). Interestingly more guides volunteered and completed the training than were used. In both college 'A' and 'B' (7 and 4) guides offered their services indicating perhaps their considered value in the advertised role.

In summary, the reciprocity of learning was mutually beneficial not only for building friendships but also increasing social skills including empathy and a heightened sense of emotional awareness of others. These qualitative findings were captured in the long number of hours students spent working alongside each other, often quietly comforted by the presence of their dyad. Some students felt the need to procrastinate on their phones for a period of time in order to feel able to concentrate and some students used the study time to really have fun with each other, make fun of the studies they were trying to learn and read to one another in strange comic accents. The key to success was choice.

Theme: 'Fun', 'Humour' and 'Banter'

Engaging in humour and fun at the right place and the right level has been well documented as a skill. Aristotle cited in (McKeon, 1941) named 'eutrapelia' or 'ready wittedness' as being able to pitch humour at the correct level. Humour has also been well documented as a significant factor involved in learning. It has been referred to as a 'social lubricant' (Morreall, 1991) and a factor that tends to 'soften hostility' (McGhee, 1988). Similarly neuroscientists have increasingly shown that humour and learning activates the dopamine reward system aiding memory cue and retention (Goel & Dolan, 2001). When reflecting on our school experiences we tend to remember those experiences with emotional association. The element that many students found pivotal was 'fun'. If some element of fun was involved then students felt positive towards the experience of working alone or with others. Students reported in video narratives that 'last session was good craik', 'last time we just told jokes', 'banter is wicked'. Friedrickson (2001) also reported this strong relationship between some of the positive emotions and the process of learning itself. Boaler (2000) shared observations of students who chatted, and lightheartedly mocked each other but also achieved deep learning and understanding of mathematics.

As seen in the video evidence, engaging sixth formers with 'A' level essay work and statistical evaluations was actually fun. Students used their wit, sense of humour and quipped about these topics to find 'a way into' these tasks. Often students made fun of the fact they were being filmed, and in a broad Geordie accent suggested; 'Today in the big brother house [names removed] will be working on IVs and DVs.' Fun was clearly crucial to surviving the study session.

Today in the educational world, in order to portray themselves as dynamic and attractive, academic establishments use promotion and competition. A trawl through sixth-form institution websites frequently showed pictures of students working autonomously in learning cubicles with headphones on, as well as pictures of students working together, promoting the collaborative nature of learning as a fun and engaging experience. The element of working together and having fun is thus not such a false perception. Harvard University websites, (Sarkisian, 2010) even devoted a section to how learning in informal groups might be effective.

As this present study revealed, students valued this need for informal learning, (perhaps with an element of fun) to increase their academic self-concept, their actual attainment and facilitate positive emotional wellbeing. Evidence of the need for an informal lighthearted learning environment came from video narrative between students 'P44' and 'P43' in a DL context:

> P44: [Reading the signs on the wall in a Russian accent]
> P43: Shut it man we have to do this sheet [ref: Multi store model of Memory A4 card]
> P44: Replies in a Russian accent [reading the flyer advertising sixth-form party] then [still in a Russian accent] 'the Peterson and Peterson experiment has since been dealt with by my colleagues in the Politburo and has been discredited as Western propaganda LTM can last forever not 18 seconds.' [Both laugh]

Deci and Ryan (1991) also reported feelings of competency increased as levels of enjoyment increased. In one peer-guided session I recorded 26 minutes of joke telling out of an hour of potential study time. The joke telling served a purpose of firstly getting to know each other and then being able to focus on

some work having created a light atmosphere supporting Morreall's (1988) idea that humour tends to act as a social lubricant. These positive emotions were contagious and were characteristic of successful learning communications. Jacques and Salmon (2006) emphasised the emotional side of learning 'to be about what lies beneath the surface of normal human interactions, let us remember the transformational effects of fun, enjoyment and play in learning' (Jacques and Salmon, 2006, p. 21).

Taking evidence from the semi-structured interviews one student explained he found the peer guided sessions to be fun and effective:

> P24: 'I would say that if I didn't go to the sessions I would have been even further behind. Because I found it made me do something with other people when I have got friends saying we have that study session to do today it is better than festering in the common room.'

Students also reported the need to extend their learning into the common room and have a 'good bit of banter.' 'P11' (DL) further explained the need for 'fun' and 'banter':

> 'You need to feel more related to the subject and the topic… to have an example in your head you can compare it to recent events… things that have happened and psychology is always good banter… we talk a lot about what we are learning in the common room. To have an example in your head helps you to have embedded complex issues'.

The importance of 'banter' as she put it was a genuine need to express theory in a contemporary informal manner. This was supported by Schunk (2001) who suggested that self-regulated learning could be achieved with sustained levels of

motivation. The motivation to discuss concepts in the common room could then have a reciprocal effect on academic self-concept. This supports Berk (2001) who proposes the psychological benefits to humour include the reduction in stress, loneliness, and anxiety as well as increasing self-esteem, providing students with a sense of control and empowerment.

Between the 'cracks' of autonomous, dyadic and peer-guided learners

As students began their study sessions in September, I was delighted with how easily some students 'slotted' seamlessly into my pre-determined learning contexts – autonomous (AL), dyads (DL) and peer-guided learning (PGL).

At the time I was eager to discover the differences between working with others and working alone. However some students developed their own ways of learning that were personalised versions of my categories. At the time, this was a surprise. One particular DL pair, for example, were fastidious and conscientious to the extent I could guarantee where they would be and what room they would be studying in without needing to check my video evidence log.

These two female students, 'P12' and 'P6', from college 'A', worked almost silently alongside each other such that the video evidence had to be reviewed on 'fast forward' to identify verbalisations. I was fascinated with their proximal need for each other, working side by side quietly and pensively and I admired their persistence and calm. Entwistle suggested that 'students differ considerably when they organize their learning' (Entwistle, 1982, p.66). This highlighted how important it was to allow students to choose their own method of study in order to maximise their full potential. I liked to call these two students parallel

autonomous dyads. Their relationship continued throughout year 13 and on to university where they corresponded and remained friends.

These two students were not easily defined by a research context and developed their own successful and personalised way of working. Falling into the 'cracks' between my predetermined categories illustrated successful learning did not entirely depend on a set of criteria for working. The theme of choice of how students not only liked to work, but developed their individuality became increasingly evident the closer I looked between the 'cracks'.

When I initially reviewed the footage of these two students I was concerned there was no active learning to report. By active learning I refer to a process where students engage in activities rather than passively listen. Perhaps this extends to 'doing things and thinking about the things they are doing (Bonwell and Eison, 1991). However upon reflection of the video footage, these students had simply adopted their most comfortable and successful ways of working together.

Glasser's Choice theory (2001) proposes students are driven by their basic needs; their urgency for a sense of belonging, power, freedom and fun. The individual choices that students make in how they wish to spend their learning time stems from these basic needs. So when student 'P36', an autonomous learner, mentioned in her interview she enjoyed working alone but also needed some social recognition, she talked about how pleased she was with herself when she showed all of her work to her friend and used this 'showing' what she had done to help her feel more secure about her effective study time. 'P36' explained when I asked her what sort of things she did in her study session:

'Do some cheatie cards – do quite a few rather than one or two – feel confident and know that I understood it, the confidence that I knew it made it effective. Once the work is finished then I could refer to it… and use them in class, I also showed them to (name) which I liked….'

Allowing students the means to adapt, modify and personalise their study sessions enriched their experiences for life and not just for 'A' level study. This confirmed findings such as Zimmerman (1996) who showed that by allowing students an increased level of choice and control, students' efficiency and resourcefulness increased. Glasser (2001) agreed too;

'I believe that to be happy, we must figure out how to get along well and connect with the important people in our lives;' (Glasser, 2001, p.5).

A further example 'between the cracks' of my predetermined categories arose from an email conversation with a student 18 months later. He explained how his peer-guided study group was effective but extended well above the hour I had organised. I hadn't appreciated that students had created a 'facebook-group' including their peer-guide and communicated (occasionally about work) throughout the week. This level of continual support and encouragement as a group had a significant impact not only on their social identity and academic self-concept but was effective for fun, banter and social cohesion. I was grateful for this insight, albeit so much later, which allowed me to reflect on potential future investigations.

Understanding Glasser's Choice theory (2001) of the four basic needs - belonging, recognition, responsibility and enjoyment, led me to discuss this in a section entitled interconnectedness of themes.

Interconnectedness of themes

Crook (2013) suggested the need for more 'togetherness' (Crook, 2013, p.35), shared open and casual spaces for study were identified in university library designs. Crook (2013) quoted Bennett (2003) where newly designed and re-modelled libraries provided 'break out' and discussion areas, as well as silent study and collaborative spaces. These areas were also mentioned in this study, students made reference to the 'chatty side of the library' where at least it felt they were 'making an effort to study'. Evidence provided by students illustrated their need for a place in which their social identity could grow. The study-period location created a place with an element of fun, banter and humour and an arena in which a positive regard for others could forge positive wellbeing.

This interconnectedness of themes provides further evidence to suggest that considerations for collective study areas at post-16 are essential. Library designs have shown the need for collaborative and 'learning commons' (Loertscher *et al.,* 2011), as students' need to engage with each other in the transitional stages of education. Assuming that learning, whether organised or not, is done by the students, the understanding of how students have created a good study environment helps us as professionals to 'teach students how to learn better' (Entwistle and Ramsden p.18, 1983).

The need for learning spaces to contain vibrancy for learning has also been confirmed. Although autonomous learners liked and preferred to work alone, it was also necessary for them to 'see' how others were getting along. The social spaces forged a social cohesion, a sense of belonging that was evident in the student themes.

Students' perceptions of a successful study session revealed a positive effect by 'tightening' their academic self-concept 'rope'. The success, they reported, was when they felt that learning was evident, they had all 'played their part' and the relaxed environment contributed to a greater sense of belonging. This interconnectedness of increased emotional wellbeing which Holzman (2009) refers to as the 'zone of emotional development' resonated with students' descriptions of a successful study group in terms of constructing understanding together. The themes of social identity, personal regard for others and elevated emotional wellbeing lessened their feelings of self-doubt and inability to achieve. It resulted in increased levels of academic effort connected to academic self-concept. This was particularly evident in students who reported they felt they were able to continue with their studies and not drop out.

The non-hierarchical horizontal structure of a study group's learning was crucial. This 'we're all in this together' mentality resulted in students unknowingly supporting each other. The structured time and date in their diaries enabled them to 'save up' questions and pick each other's brains within a safe haven from self-handicapping strategies. In short, the session meant that they could develop their understanding of a particular topic, without fear of peer ridicule, alongside developing a sense of belonging necessary to cope with the instability of such transitional periods. The linking of the themes academic self-concept, personal regard for others and social identity became evident.

Social constructivism as a frame for the study

Social constructivism as an approach to the social sciences drew from a number of academic disciplines including sociology, philosophy, linguistics and social psychology. However many of it's basic assumptions are grounded in sociology; (social interactionism and symbolic interactionism) where researchers could be capable of standing outside 'and commenting on the discourse for the benefit of lay people' (Burr, 2015, p. 208). Discursive psychology, for example, focused on social interactions and language, 'how people use language in their everyday interactions, their 'discourse' with each other' (Burr, 2003, p.17). Language and the knowledge transmitted by means of language are a social phenomena. It was therefore essential to see how knowledge was not only constructed but co-constructed with others.

Social constructivists argued that the world which we experienced and the people 'we find ourselves to be are first and foremost the product of social processes' (Cromby and Nightingale 1999, p. 4). Most social constructivists agreed that these social processes, primarily language, were central to everyday life experiences (Andrews, 2012). This theoretical framework suggested knowledge could not be passively transmitted from a teacher to a student, and that learning and understanding was an active process of asking, confirming through questioning, enquiry, and subjective experiences. In this way individuals or groups of individuals define their reality. This study was important to my understanding of how students' knowledge was strengthened or weakened by working with others.

Critics of social constructivism argued it was an elitist frame whereby students who benefited from discussion and group working were a certain type and had the benefit of a socialised background of working together. In terms of a cultural and sub-cultural norm discussed in chapter 1, those students who found it difficult to adjust to working with others and sharing their ideas and time with others were not uniformly positive. Entwistle suggested 'it is in private study that students are more likely to try out their own ideas and explore the implications' (Entwistle, 1982, p. 66). Race (1994) agreed and argued that most learning occurs independently. He argued students learnt best at their own pace, at their own times and in places where they felt in control of their own learning. This finding was mirrored in the present study where students who worked alone enjoyed the lack of distractions and worrying about whether they understood the work and were 'getting along ok'. One female student 'P17' explained it took less emotional effort to work alone. 'P17' (AL) noted in interview that:

'I found on my own is easier there is no-one distracting me and it is nicer to work by myself instead of constantly thinking of whether (name) is getting it and I focus on my own ideas.'

I recently discussed the zone of proximal development with a fellow teacher-researcher who remarked recently in an email 'I've had some good experiences of students using phones quickly in lessons to check knowledge of key material, basic introductions etc… but I think that's more because they tend to like gadgets in general rather than because they greatly aid learning. I don't think anything can be as good as real dialogue in the classroom, both student-student and teacher-student. Such a learning atmosphere I don't think can be quite created through technology alone as it lacks the human element' (J. Hopper

personal communication, February 20, 2015). I tend to agree and will encourage students to work together in as many different methods as they prefer.

Before I offer a conclusion to the study I summarise the key themes. Quantitative and qualitative findings revealed a positive relationship between an increase in students' academic self-concept and their attainment. Students found solace in working together, they experienced social support emotionally as well as academically that allowed them to progress more confidently with their studies. Those who experienced a group led by an MKO found it useful in generating knowledge through the guidance of others. The choice to work with whom and how they wished was key to the success of the twelve-week intervention. Students needed to have fun whilst they worked, some spent time working quietly alongside each other and others needed banter and light mockery, and perhaps a bit of procrastination in order to 'get into it'. The conclusion draws the study and the literature to a close.

Chapter 5

Conclusion

Introduction to the conclusion

This final chapter reviews how and why this study was conceived in a mixed methodological framework and social constructivist paradigm. I show how my findings link to literature revealing an important realisation about aspects of learning, academic self-concept and student transition. My experiences as a teacher undertaking a professional doctorate will also be of interest to the reader, as elements of my transition mirrored those of the students. I discuss limitations, suggest future areas of research, replication of methodologies and make reference to relevant literature resulting from the emerging themes (portrayed in a different format as Figure 80 in Appendix), bringing the study to a close.

Review of rationale and contribution to knowledge

Professional learning

In my introduction I painted a picture of students feeling inadequate as they moved from GCSE content-driven teaching to an 'A' level arena where teachers expected independent study and higher order thinking. I stated students struggled, (Andriessen *et al.,* 2013) felt academically (Tate and Swords, 2013) as well as emotionally lost (DfE, 2014). As a professional I noticed this and undertook research to explore what happened when using a socially constructivist intervention to aid students' transition.

The decision to undertake this research studying the psychology of students' learning supported my professional development. The benefits of this chosen degree as McWilliam (2002) suggested, provides real opportunities for those 'seeking to engage more deeply with their own fields of learning' (p.2). The process of planning, collating, evaluating and presenting this information has been of great value to my professional skill as a teacher, and professional praxis (Brookfield, 1995) supporting as Lunt (2015) suggested, a rigorous reflection of practice with an intrinsic personal / professional affirmation as a goal. Indeed according to the UK Economic & Social Research Council (ESRC) students who undertake a professional doctorate are expected to 'make a contribution to both theory and practice in their field, and to develop professional practice by making a contribution to (professional) knowledge.'

Contributing to the learning of others

Eager to make a professional contribution to knowledge and praxis illustrating the value of purposeful action, I sought varied ways to disseminate my findings within academic and professional communities. Presentations to Northumbria University at Newcastle and Sheffield Hallam University research conferences in 2013 and 2015, British Psychological Society 2012 and 2015, Association for the Teaching of Psychology (ATP, 2014) and magazine articles (Bone, 2013), have generated positive feedback. Peer reviewed articles and presentations have allowed audiences to engage with and reflect upon the mixed methodological framework as well as the interesting findings.

Professional presentations to head teachers and governors and increasingly parents of sixth form students of local schools produced interest and were well received. Such audiences of sixth form teachers, head teachers and governors are especially concerned about their students' wellbeing. At a recent meeting, the chair of governors and two parents shared how important they thought the organisation of More Knowledgeable Other (MKO) study groups might be, especially, they thought, for their sons and daughters who were at a 'fragile stage'. Further informal discussions with colleagues who are heads of sixth form, suggested this additional support could have prevented 'a number of students going elsewhere'. Numerous researchers support these findings (Holzman, 2009; Hall, 2003; Ladyshewsky, 2000; Woolfolk *et al.*, 2001; Yorke and Thomas, 2003; Flum & Kaplan, 2012) providing evidence of emotional and identity issues in transition.

The Association for the Teaching of Psychology invited me to present a CPD session on sixth-form learning (ATP, 2014), which was positively received. As this arena was an informal, fun and non-hierarchical CPD amongst professionals, further opportunities might provide a useful arena in which to model good socially constructivist practice. Mirroring the findings of the study, I found that choosing to lead a CPD session for fellow professionals, using fun and banter to express my points placed me as a MKO leading a study session. I added humour to the presentation and as a result made the workshop more memorable and accessible for the attendees.

In the same vein, in my role as AST (Advanced Skills Teacher) I am able to offer encouragement to fellow teachers who aspire to become teacher-researchers and in developing my own professional praxis (where theory and practice seem to merge) they too are able to recognise the benefits of simple, pragmatic solutions to design, and have clearly shown the replicable benefits of dovetailing quantitative and qualitative methods (Silverman, 1995). The ability to be able to discuss potential research ideas, methods, designs and philosophies has been one of the hidden benefits to doctoral study.

This study grounded in a social constructivist philosophy of educational practice made a contribution to the students in this study. Some students engaged in the study welcomed the opportunity to reflect on their learning. When students felt more competent having focused on how they learnt best, their rope of academic self-concept (Hattie, 2004) strengthened, likewise while undertaking this genuine study my own academic self-concept developed. Anecdotal evidence from students I have taught and from students who participated in this investigation continues to arrive years later as they have contacted me with further

recommendations and suggestions to improve the sixth form experience, which shows how reflective they also have become (Baumgartner, 2001). Particular student quotations have been used to illustrate points throughout this document and were especially appropriate to encapsulate the message at the beginning of a presentation to the BPS, Psychology of Education Section in October 2015. (Bone, 2015)

My transition from teacher to teacher-researcher

Kincheloe (2003) called for teachers to create their own research and establish a high degree of professionalism that he saw was missing in education. I agree with the need for teachers to research their environment creating data that is personally and globally relevant for the 21st Century. Teachers recognised that researchers were not always familiar with their world and were reluctant to accept research-led changes. Willingham (2015) suggested teachers use cognitive dissonance to ignore how their practice could be updated when they heard that research evidence trumps experience! This attitude from teachers was hardly surprising as their professional lives were subject to a barrage of constantly changing whimsical directives from their political masters. Disappointingly Hattie warned against teachers becoming researchers. He saw researching as a particular skill, 'some of us took years to gain that skill. Asking teachers to be researchers? I want to put the emphasis on teachers as evaluators of their impact. Be skilled at that. Whereas the whole research side, leave that to the academics' (Stewart, 2015).

This ignored the significant benefits that the teacher-researcher could bring to the reality of findings embedded in professional practice. With a dual identity of

researcher and teacher, high quality investigations can be achieved whilst respecting ethical tensions. The important question should be, not who is *better* or more qualified to research, but why more teachers do not want to engage as researchers? My identity transitioned to 'teacher with research experience' and with this came a wealth of added value (Brookfield, 1995).

As a teacher-researcher, I am able to recognise students' academic self-concept, listen knowledgeably to their learning conversations (Pitcher, 2014), see the academic self-handicapping (Bandura, 1997) and the weakening of the rope to which Hattie (2004) referred. With this heightened awareness a more learned professional has emerged. What better reason to complete a professional doctorate than to be more informed in the psychology of learning? My teaching is strengthened not only by understanding the significance of the literature, but also how my thoughts about learning have changed in the light of my own investigation. Research undertakings such as this one are not only of value to students (Baumgartner, 2001) but also to teachers, head teachers and governors as well as academics and leaders of further education who lobby for more resilient, competent and buoyant learners (Bone, 2015) and were also of use to me, a teacher-researcher constantly striving to combine theory, reflection and practice to improve my professional praxis (Brookfield, 1995).

Limitations of the study

This study was originally designed to include several schools with a larger number of participating students from a range of different schools and curricular areas creating diversity. Due to logistical and ethical issues, the sample was limited to seventy-three from two colleges. At the pilot stage many colleagues showed interest in the research proposal however due to the constraints of time and available resources (such as a bookable spare room for study with video equipment) many of the interested teachers were unable to take part.

Comparing students who were experiencing psychology for the first time with students studying a familiar subject but simply at a higher level may have proved illuminating e.g.; investigating students from GCSE Sociology to 'A' level Sociology, where many of the elements of their learning were not completely new. Similarly, investigating how this transitional intervention influenced students' learning in their other chosen 'A' level subjects might have been a useful data set to analyse. Anecdotal evidence since the study elapsed regarding fun, positive regard for others and the feeling of positive emotional wellbeing in their other subjects were of interest. Students reported that in certain subjects how alone they felt and whether such groups would be beneficial for certain other subject areas. This would have been powerful to capture and compare. However without their ethical permission this opportunity has now passed.

Further to investigating students' perception of their transition from GCSE to 'AS' level, it may also have been useful to interview their parents to understand their perspectives on the transition process. It is worth noting that although peer groups are significantly relevant to adolescents' wellbeing, the importance of

parental support at 'A' level should not be discounted. Receiving information from parents and carers regarding homework, stress levels and attitudes to study (Turanli, 2009) may have created a more holistic perspective that could have been of great value as with the 'tips' now given to parents on a global basis by the Harvard Family Research Project (2010).

The aim of any educational system is to increase the academic performance of their students. This raises a question, what do we actually mean by 'good education'? If we mean that education is a high grade in written AQA examinations for example, then only those students who have the ability to perform well on the day, under timed conditions where their memory capacity rather than their understanding of the whole subject is being operationalised have succeeded. This raises another question, whether these public examinations have any predictive validity and whether they measure real knowledge and understanding? This led me to think if an additional measure could have been used.

A useful triangulated measure alongside exam attainment may have been to ask an independent assessor to interview the students and verbally explore their knowledge and understanding, illuminating a richer link to their academic self-concept. Although not without inherent problems such as participant reactivity, an interview situation may identify students' confidence and real understanding in contrast to students who learn verbatim phrases and sentences and guess at exam questions without truly understanding the subject.

At the initial stages of this investigation I considered the use of teacher evaluations as an additional academic performance indicator. Marsh, Parker and

Barnes (1984) and Marsh, Smith and Barnes (1985) showed empirical evidence to support the claim that teacher evaluations were sufficiently valid. However due to the nature of my position as teacher-researcher, I decided to opt for exam grades as an externally validated widely accepted independent measure of academic performance.

In order to assess academic self-concept this study collected data via the SDQ-III. The reduction of the number of questions from 136 to 40 was a good decision to make and reducing the scale to 6 from the proposed 8 point Likert scale made the responses less complicated for students. However as further validation I would have liked to use in addition the Students' Approaches to Learning Instrument (SAL), which has successfully demonstrated (Marsh, Hau *et al.*, 2006) the importance of academic self-concept in educational research. Questions that appear within the SAL may have resonated with some academically weaker students. With such a tool I may have been able to identify additional strategies of use to particular students.

Future research ideas

This study has been a significant insight into the world of a sample of transitioning sixth-formers. As a result of this knowledge I would have liked to develop a theory of transition. Although a great deal of data was gathered I would have liked to extend the sample and investigate a variety of schools perhaps with a gender difference in mind (Bowles and Hattie, 2015). With a more diverse set of students, there would be more scope to gather data to suggest a staged process of transition.

These stages of transition might begin in a pre-contemplation phase of choosing the subjects at 'A' level. Investigating students' rationale and preconceptions about 'A' level study would be hugely valuable and the study could extend across a two-year course (as all 'A' level subjects will be two years with no interim 'AS' exam as of September 2015). I consider this next study would be a valuable insight into observing the evolution of academic self-concept (Mercer, 2011) and the tightening of the rope (Hattie, 2004) moving the inexperienced naïve learner to a self aware, competent one. I would envisage learners moving in a fluid manner through the stages of transition.

The benefits of a triangulated mixed methods study have been illustrated in this study and would be valuable in generating a theory, perhaps further incorporating parents' and carers' views. A teacher engaging in research that is closely aligned to their practice makes intuitive sense and, as such, research questions need to originate from the teachers themselves (Bonne and Prichard, 2007). The methodology and methods that I embraced may inspire other teachers to take up the mantle to investigate a combination of theory, reflection and practice in order that teachers' professional praxis is developed (Brookfield, 1995).

A further opportunity to enhance future studies would be track, compare and analyse the variety of methods students engage with. For example in order to study the effect of academic self-concept on mixed-learning, a student who engaged as a dyad during college time and then occupied their evenings studying via 'Face-time' with their friends. The variety in multiple study skills could be assessed using group or semi-structured interviews and may reveal more about the benefits of several or combined study skills. In line with Campbell

(2000) who suggested maybe we do adapt and change, like driving down the motorway, adapt to the hazards ahead and then negotiate around other road users to achieve a safe and effective journey.

Contribution to the field -the future of learning at post-16

I suggest that the value of education is more about the quality of students' learning than quantification through certificates achieved. Engaging students in the process of wanting to learn was key, and how to lead and encourage sixth-formers to become effective and successful learners has been a major finding. Rather than teach students study skills in a formal manner (Jairan *et al.,* 2014) facilitating informal groups with elements of choice and fun can increase engagement and emotional wellbeing. My findings are supported by Farrington *et al.,* (2012) who concluded that the 'critical lever for improving student grades seems to be through the development of academic mindsets and learning strategies' (p. 73). My qualitative findings indicated students valued the opportunity to learn with others, strengthening academic perseverance, meaning they continue to work despite setbacks. 'Academic tenacity' (Dweck, Walton and Cohen, 2011, p .5) began when students learnt these academic behaviours ensuring survival at a sixth-form level. This skill, as Bandura (1997) suggested, became self-efficacy for life, and a 'lifelong' effect (Coffield, 2000) shown in this study as a quantitative increase in academic self-concept.

In order that the findings of this study can be utilised, teachers and educationalists could encourage and facilitate informal learning in groups, perhaps led by a MKO. Rather like Durkheim's (1952) 'anomie,' the emotional benefits and cohesion generated by working at a horizontal level with other like-

minded peers were illustrated in this study. Students reported an increase in emotional stability and specifically during the transitional period this was regarded positively. Their increased self-belief, shaped by the messages they received from their peers (and also positive reinforcement from their teachers) led students to report a positive academic self-concept, which we know is positively related to attainment (r=+0.299) and therefore they became less likely, as Rosen *et al.,* (2010) suggest, to drop out and fail.

Teachers of sixth form students are in a pivotal position to inspire and consolidate learning for life. Teaching strategies that are used in year 12 would ideally continue into year 13 and then perhaps into higher education. Many universities have noted their frustrations with spoon-fed students and have altered their teaching and learning strategies, Centre for Active Learning (CeAL, 2009); Chapman *et al.*, 2014). A bigger problem is reminding teachers of the social constructivist and active learning strategies in order to model and facilitate these ideas and structures. An opportunity in which to model, share and evaluate sixth form teaching and learning strategies might be a useful continual professional development (CPD).

The student voice heard through this research indicated acquiring knowledge was an active process not a passive receipt of information. Teaching for understanding coupled the processes of knowing and doing (Healey *et al.,* 2005). My findings were supported by Laurillard (2008) confirming teachers need to be less eager to 'feed' students; 'Therefore, the role of the teacher is not to transmit knowledge to a passive recipient, but to structure the learner's engagement with the knowledge, practising the high-level cognitive skills that enable them to make that knowledge their own' (Laurillard, 2008 p. 527).

Students whose understanding and knowledge was shaped and cultivated through the interaction in the group allowed them to access the zone of proximal development Vygotsky so clearly explains (Vygotsky, 1978)

'Learning to Learn' as Coffield (2000) explained, is the 'promised land of lifelong learning'. In the current educational system 'every year this enormous chariot is redesigned, parts are added and subtracted, and the wheels are oiled to ensure that it runs faster and faster. The underlying approach appears to be `let's try everything we can think of in the hope that something(s) will work'. But, as the German proverb has it, what is the point of building up speed if we are not on the right road?' (Coffield, 2000, p. 242).

Elton (2015) told stories of teachers and lecturers trying to change their strategies into more active and dynamic ones to move away from the 'traditional spoon-feeding'. Students who evaluated the active approaches suggested they were 'great but it's too much like hard work' (Elton, 2015, p.2). Students preferred the 'feeding' and traditional 'nutritionist' (Freire, 1985) model as it demanded less effort, however I would argue their learning was consequently less effective in the long term. This research showed that increases in academic self-concept, emotional wellbeing, positive regard for others, fun and choice led to a more successful transition into sixth form study a love of learning for life. This could be achieved not only through collaborative learning interventions but allowing students a choice of strategies so that they could explore the benefits of free / study periods.

Enhancing the quality of interactions between students, making time available for them to study together, as well as teaching, scaffolding and modelling effective

study skills (Shetty and Srinivasan, 2014) remained paramount to the success and longevity of a life-long learner. Inspired by the stories of transitioning students in Ball, McRae and Maguire (2013) this study suggests that schools, and particularly sixth-form colleges, should respond to the needs and preferences of learners from different contexts. This might involve, as this study revealed, enabling a trial of each session, to meet up with the guides in order to minimise personality clashes and to allocate rooms and various seating arrangements catering for diversity. Students could then make more informed decisions about what would be effective for them (Gross *et al.,* 2015). These were the important messages that emerged from this study.

In conclusion

The findings and conclusions of the study are presented in a process chart Figure 51 overleaf where the benefits of working with others in a new and transitional environment are shown to have an impact upon academic self-concept, actual attainment and a love of learning. I see this representation as the final phase of my theory of transition that has yet to be fully researched.

Notwithstanding potential improvements, what this study showed above all else was given the skills, opportunity and with a certain atmosphere and environment, these students evidenced a love of learning rather than just going through the motions. Students continued with their study groups and study sessions long after the filming stopped, arranging additional study sessions and inviting new guest members. They felt and saw the mutual benefits of learning together to become long-term learners.
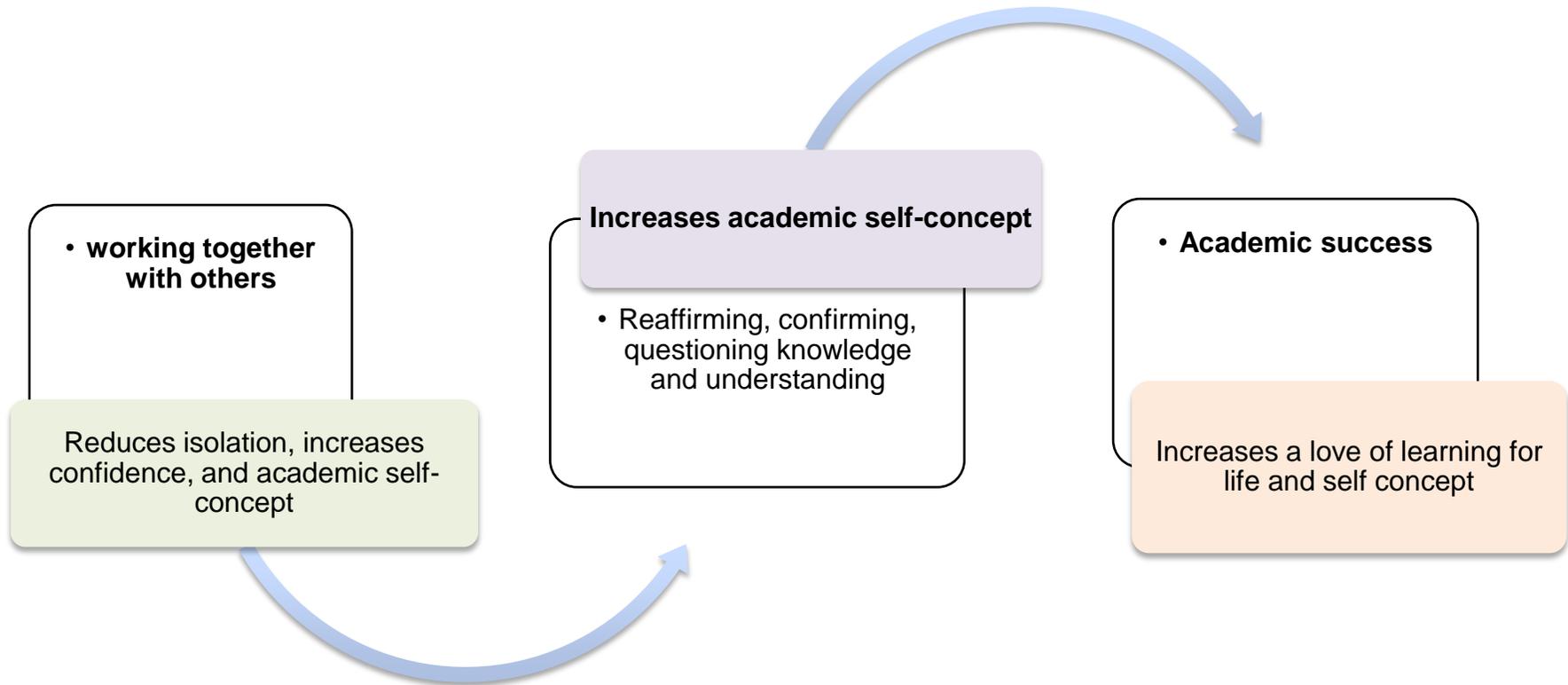
Figure 51 Academic self-concept and attainment led by social constructivist learning

Appendices

Personalised visual representation of the study   Figure 52 Visual Representation

Glossary and definition of terms

Self-concept

Self-concept is expanded upon in later sections however remains a complex concept discussed by psychologists and educationalists. Sarah Mercer's (2011) explanation of self-concept is that of a dynamic, multi-dimensional psychological construct, which not only influences but is also affected by a individual's social environment and interactions which of course also vary across situations and settings. An individual's self-concept is a measure of one's 'self-perception' (Mercer, 2011, p.14). It is as Marsh *et al.,* (1983) explained not the facts about oneself, but instead what one believes to be true about one-self.

Academic self-concept

The multi-faceted model of self-concept created by Shalveson, Hubner and Stanton (1976), suggested that self-concept consists of a global self-concept, which comprises of academic and non-academic components. One of these facets or 'threads' making up the 'rope' of self-concept (Hattie's rope analogy, 2004) is suggested to be academic self-concept. For this study Mercer's successful definition of academic self-concept was borrowed:

'Academic self-concept is thus an individual's self-perception of competence and their related self-evaluative judgments in the academic domain' (Mercer, 2011, p.14). This offers an expertly crafted definition of what I hope to investigate in this study.

Academic achievement

Academic achievement in this study denotes the level of attainment the post-16 adolescents have attained in externally assessed examinations. In this case externally examined qualifications are those assessed by the examination board AQA (Assessment and Qualifications Alliance) which is an education charity and leading provider of qualifications and awarding body in England, Wales and Northern Ireland. This body is regulated by OFQUAL (Office of Qualifications and Examinations Regulation), which is the regulator for the public examination system in England and Wales. At the time of writing, AQA has undergone a major government-led specification change, and so the academic achievement refers to the specification used for 2013. (AQA, 2014a)

Learner

In this study a learner referred to all of the adolescents taking part in the study. These learners are students attending either one of the two Academies. They are all students and may act in the role as a peer guide or as a part of a dyadic pair. They are all actively engaged in the acquisition of knowledge, skills and comprehension for their two-year 'A' level course.

Secondary school and sixth-form colleges

The range of institutions that adolescents attend varies greatly. The majority of post- 16 learners in the UK attend Further Education (FE) and sixth-form colleges not in school sixth forms. Post-16 education consists in the form of apprenticeships, day release from technical colleges, sixth-form institutions attached and integral to a school or Academy, sixth-form colleges exclusively for post-16 students as well as Children's Trusts providing support for

disadvantaged post-16 students. Students in the present study are in a sixth-form, which is integrated into a school. Sixith-form students have their own identity (e.g. non-uniform and study leave and separate assemblies) but are educated in classrooms amongst all other year groups.

The main differences between schools and sixth-form colleges are the structure of the timetables where sixth-form colleges often have several hours between lectures / lessons and those sixth forms located within schools tend to be rather more structured. Furthermore the variety of students varies more within a sixth-form college as a larger number of students of varying abilities are offered more courses

A levels

Pring *et al.,* (2009) quotes attendance statistics from 2007 whereby 'in England, of the 79% of 16 year olds participating in full time education 41.8% were in colleges, compared with 37.1% in schools. Across the 16-18 ages range, and including those in fulltime and part-time study 52.4% were in colleges as compared to 34.6% in schools (Pring *et al.*, 2009, p, 50).

'A' levels arrived in 1951, and are now the most popular single qualification taken by 16 and 17 years olds and nearly half of all 16-18 year olds take this two year 'A' level (GCE- General Certificate of Education) qualification (at the time of writing 'AS' is half of the 'A' level qualification). Attainment per candidate is calculated into point scores collated in England by the QCA and the overall average for 'A' level grades at post 16 is steadily increasing. In 2005-2006 this was 721.5 and in 2006-2007 this rose to 733.5.

Post-16 learner

It is widely understood that 'too often points of transition become exit points' in students' educational journeys (Harnisch and Taylor-Murison, 2010, p.1). As a result the Department for Education website states it has become increasingly difficult in the present economic climate in the United Kingdom for young people without qualifications to find an unskilled job. They suggest therefore to schools and governors that because of this it is even more important for 16-19 year old people to be prepared with education, training and apprenticeships. The Importance of Teaching White Paper (DfE, 2010) lays down the new guidelines by which all young people will be expected to participate in education and training at 17 by 2013 and 18 by 2015. Reasons for promoting this increase stems from fears that young people Not in Education Employment or Training (NEETS) are increasing.16-19 participation rates of young people in UK education and training compares embarrassingly badly with other industrialised countries. Wylie (2006) states English teenagers lay bottom third (just above Turkey and Mexico) in a list of participation rates for 15-19 year olds.

Many students who commence the advanced level course have attained very good grades at GCSE. As a result of their good grades they tend to be basing their anticipation of advanced level study on past experiences, when informally questioned they often reported it to be a 'memory exercise', mirrored by other findings (Deuker, 2014).

Adolescence

Erik Erikson (1968) sees this period of human development as stage five:
Identity vs. Confusion. This stage involves 'Sturm und Drang' (Stormy and
Stressful times – Hall, 1904) which he regarded was necessary for a full identity
to emerge into the next stage of human development. Adolescence is a critical
period for maturation of neurobiological processes; the pre-frontal cortex (PFC)
underlies higher cognitive and social functions and undergoes structural
developmental changes. The development of the PFC shows increased ability in
abstract reasoning, attentional shifting, and response inhibition, processing
speed and shifts in emotional capacity. Yurgelun-Todd (2007) summarised 'brain
regions that underlie attention, reward evaluation affective discrimination,
response inhibition and goal-directed behaviour undergo structural and functional
re-organisation throughout late childhood and early adulthood' (Yurgelun-Todd,
2007, p. 1).

Adolescence may be divided into early and late whereby early adolescents are
referred to as 14-15 and late 16-19. The age range that denotes adolescents in
the present study are students who are 16-19 years. Research with adolescents
shows their ability to engage in abstract thought processes means they begin to
make decisions about motivation and engagement based on their feelings of
competence. Farrington *et al.,* (2012) suggested this began to have an affect,
'…this heightened sense of vulnerability, combined with a growing sense of self-
efficacy and a greater recognition to manipulate their environments through their
behaviour, underlie adolescents decisions whether to engage or withdraw effort
in the classroom' (Farrington *et al.,* 2012, p. 56). From a sociological perspective
Smith, Christoffersen, Davison and Snell Herzog (2011) coin this period of
development as 'emerging adulthood' in which although they see this shaped by

their elders as their agents of socialization, they are uniquely affected and influenced by contemporary experiences. These emerging adults are often unable to have reported any moral dilemmas in their lives and, for example, are unable to defend their own moral philosophies as they fail to consider moral problems in every day life.

Similarly the psychodynamic community particularly, Blos (1966), who described adolescence as a second phase of individuation whereby a pendulum-like movement of clinging to parents for comfort and support and wanting independence, a view is mirrored in many case studies (Reis and Buhl 2008). Adolescence is a period of feeling neither here nor there, and the constant shifting between the stable world of a secure maternal attachment and individuation creates an emotional and inner conflict in the self. This problem is known to psychoanalysis as dislocation and is amusingly illustrated in the character 'Kevin the teenager' (Enfield, 1990) created by Harry Enfield (who clings to his parents but at the same time hates them for not being fulfilling enough.)

Peer-guided learning

Based within the Vygotskian principles of using the More Knowledgeable Other (MKO) to guide and socratically tease out thinking without telling the answer, this method of group work involves one individual who is more knowledgeable than the learners. This MKO is not always an adult and in this case is a student who is one year ahead of the rest of the group in terms of their learning and achievement. This approach to learning actively involves the students in explaining, drawing diagrams, (sometimes even role play and mime). MKO's are

trained not to teach, not to tutor, but specifically to guide the student to the correct assumptions through the use of questioning. This differs greatly from peer tutoring where the learner and the students are engaged in a mini-lesson.

Dyadic learning

In the present study this referred to the students selecting a partner with whom they can study. Dyads by definition are pairs. This is a horizontal or equitable partnership in which each student has equal status and fair responsibility for their own learning goals,unlike a teacher / learner role.

It has been shown that although learning together can enhance cognitive ability, dyads may also inhibit each other from reaching a maximal memory capacity (Basden *et al.,* 2000). Explanations for this come from a social loafing phenomena or a lack of cooperation between group members (North, Linley, and Hargreaves, 2001).

Autonomous learners

Autonomous learning in this study referred to learning alone in study periods. In the literature it is also referred to as student-centered learning, independent learning and flexible learning (Taylor, 2000). It relates to the change of focus from the teacher in the classroom to the student leading his or her own learning independently.

Students in this study have opted to use their study periods alone, away from the distractions of others, often in the confines of a quiet booked meeting room to

allow themselves complete focus on their work. In other words, solely the student drives learning.

Not always perceived to be positive, Lea *et al.,* (2003) using psychology undergraduates highlighted their concern over being abandoned or isolated from other supports in a student–centered learning approach. Students who value or have experienced more teacher–focused approaches, may not feel positive with this method of learning and reject it as frightening.

'Personalised learning'

This term and new philosophy for learning was announced by the Labour government minister Miliband in a speech at the Education Conference in Belfast. He proposed that 'personalised learning' or 'deep learning' (Sims, 2006) aimed to tailor teaching and learning programmes and assessment to the strengths and needs of the students. His aim was for education 'which is tailored to their unique learning styles, motivations and needs' (Miliband, 2004, p. 1). Hargreaves (2004) suggested a personalised learner is 'an articulate, autonomous but collaborative learner' with high meta-cognitive control and the generic skills for learning gained through engaging educational experiences with enriched opportunities and challenges (Sims, 2006).

Figure 53 Glossary and definition of terms

Consent Form (PILOT) PGL

Consent Form
Title of Project: Collaborative Learning PILOT – GUIDED LEARNING GROUP

Name of Researcher: Celia Bone BSc (Hons), MA, and MBPsS.

Please initial the box

	YES	NO
I confirm that I have read and understood the information sheet dated………………..for the above study. I have had the Opportunity to consider the information, ask questions and have had these answered satisfactorily.	☐	☐
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without any medical care or legal rights being affected.	☐	☐
I agree to take part in a videoed learning session with other students I am happy/not happy for this to be recorded.	☐	☐
I understand that relevant data collected from me during the study may be looked by the Colleges, regulatory authorities and the researcher's supervisors at the University. I give permission for these individuals to access to my records. Records provided does not identify me in any way and I understand that all information will be kept anonymous.	☐	☐
I am aware that some quotes may be used in a thesis or article but that I will not be identified in any way.	☐	☐

……………………………   …………………….   …………………….
Name of Participant   Date   Signature

……………………………   …………………….   ……………………..
Name of Researcher   Date   Signature

Consent Form (PILOT)

Title of Project: Collaborative Learning PILOT – PAIRED LEARNING GROUP
Name of Researcher: Celia Bone BSc (Hons), MA, and MBPsS.

Please initial the box

	YES	NO
I confirm that I have read and understood the information sheet dated………………...for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	☐	☐
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without any medical care or legal rights being affected.	☐	☐
I agree to take part in a videoed learning session with other students I am happy/not happy for this to be recorded.	☐	☐
I understand that relevant data collected from me during the study may be looked by the Colleges, regulatory authorities and the researcher's supervisors at the University. I give permission for these individuals to access to my records. Records provided does not identify me in any way and I understand that all information will be kept anonymous.	☐	☐
I am aware that some quotes may be used in a thesis or article but that I will not be identified in any way.	☐	☐

………………………………   ……………………..   ……………………..

Name of Participant   Date   Signature

………………………………   ……………………….   ……………………….

Name of Researcher   Date   Signature

Figure 54 Consent form for PILOT

Self Evaluation
TICK ONE Group - PGL / DL/ AL

Peer guided learning ☐

Dyadic learning ☐

Autonomous learning ☐

Name / Number………………………………
Date……………….…………………2012

Title of Project: Bridging the gap at Post 16
Name of Researcher: Celia Bone

How **helpful** was the session actually for **you in completing the task?** (On a sliding scale please **SHADE** the percentage)

0%   25% helpful   50% helpful   75% helpful   100%helpful
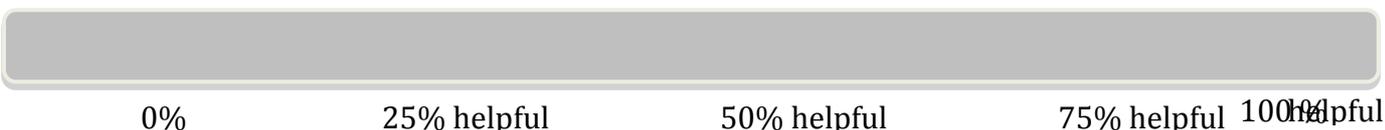
During the session what percentage **ON TASK** were you ? Please include being **engaged, arguing, questioning and listening to others- ?** (On a sliding scale please mark on your %)

0% ON   Now   25% ON   think   50% ON   about   75% ON   100% ON
Task   being OFF Task….
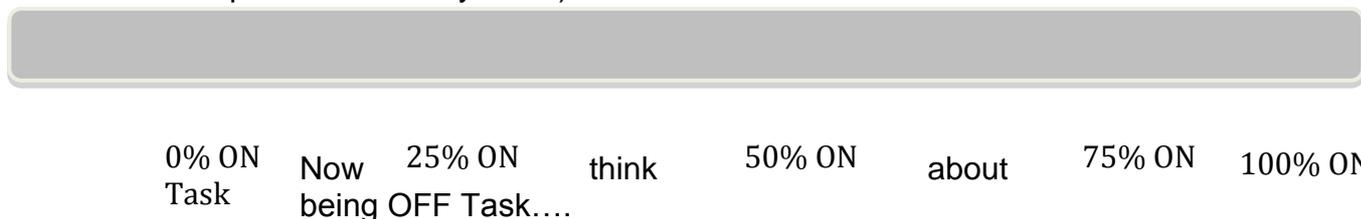
3. During the session what percentage **OFF TASK** were you? Please include **deviation, distraction and disengagemen**t - **?** (On a sliding scale please mark on your %)
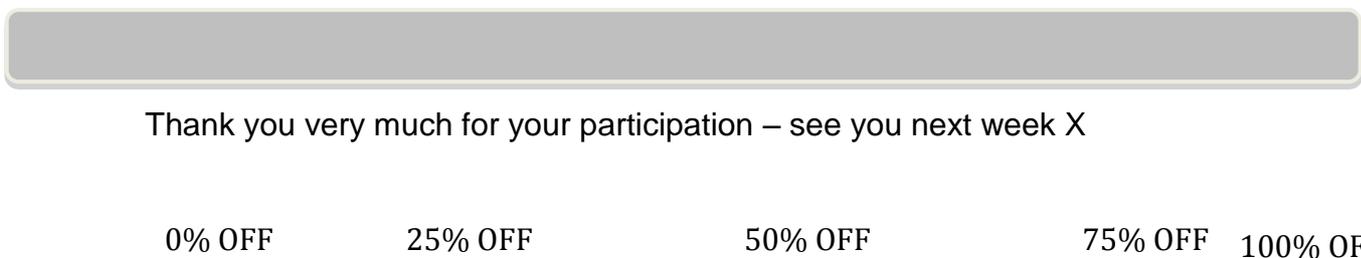
Thank you very much for your participation – see you next week X

0% OFF   25% OFF   50% OFF   75% OFF   100% OFF

Figure 55 PILOTED Self-evaluation tools

Consent Form for GUIDED or PAIRED LEARNING

Title of Project: Academic self- concept, collaborative learning -Bridging the gap at post 16.

Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS)

Please initial the box

	YES	NO

I confirm that I have attended the information evening and
am fully informed about the nature and aims of the study.
I have had the opportunity to consider the information, ask questions
and have had these answered satisfactorily.

☐ ☐

I confirm that I have read and understood the information sheet
dated………………...for the above study. I have had the opportunity
to consider the information, ask questions and have had these answered
satisfactorily.

☐ ☐

I understand that my participation is voluntary and that I am free to
withdraw at any time without giving any reason, without any
medical care or legal rights being affected.

☐ ☐

I agree to take part in a videoed learning session with other
students I am happy/not happy for this to be recorded.

☐ ☐

I understand that relevant data collected from me during the study
may be looked by the Colleges, regulatory authorities and the
researcher's supervisors at the University. I give permission for
these individuals to access to my records. Records provided does
not identify me in any way and I understand that all information will be kept
anonymous.

☐ ☐

I am aware that some quotes may be used in a thesis or article
but that I will not be identified in any way.

☐ ☐

……………………… ……………/09/2012 ……………………..
Name of Participant   Date   Signature

………………………… ………………/09/2012 ………………………..

 Name of Researcher   Date   Signature

Consent Form for AUTONOMOUS LEARNING

Title of Project: Academic self-concept, collaborative learning -bridging the gap at post 16.

Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS

Please initial the box
                                    YES   NO

I confirm that I have attended the information evening and am fully informed about the nature and aims of the study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I confirm that I have read and understood the information sheet dated………………...for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without any medical care or legal rights being affected.

I agree to complete a short questionnaire following my study sessions in order to evaluate my study session..

I understand that relevant data collected from me during the study may be looked by the Colleges, regulatory authorities and the researcher's supervisors at the University. I give permission for these individuals to access to my records. Records provided does not identify me in any way and I understand that all information will be kept anonymous.

I am aware that some quotes may be used in a thesis or article but that I will not be identified in any way.

…………………………… ……………/09/2012   ………………………..
   Name of Participant   Date   Signature

………………………… ……………/09/2012   ……………………..
       Name of Researcher   Date   Signature

Figure 56 CONSENT forms

SDQIII (Scanned copy)

NAME and SURNAME: _____

STUDY YEAR LEVEL: _____   ☐ K1

<u>SELF-DESCRIPTION QUESTIONNAIRE (SDQ-III): A MEASURE OF</u>
<u>ACADEMIC SELF-CONCEPT (An adapted version)</u>

© H.W. Marsh. 1999. Self-Concept Enhancement and Learning Facilitation (SELF) Research Centre, University of Oxford.

This is a chance for you to consider how you think and feel about yourself. This is not a test — there are no right or wrong answers, and everyone will have different responses.
On the following pages are a series of statements that are more or less true (or more or less false) descriptions of you. Respond to the items as you now feel even if you felt differently at some other time in your life. In a few instances, an item may no longer be appropriate to you, though it was at an earlier period of your life. In such a case, respond to this item as you would have when it was appropriate. Try at all cost to avoid leaving any items blank.
Answer the following questions by allocating the most appropriate number to yourself, between 1 and 6 on the scale below.

1	2	3	4	5	6
Definitely false					Definitely true

1. I find psychological problems interesting and challenging k2

2. I have trouble expressing myself when trying to write something. k3

3. I enjoy doing work for most academic subjects k4

4. I am never able to think up answers to problems that haven't already been

   figured out. k5

5. I have hesitated to take courses that involve psychology. k6

6. I can write effectively. k7

7. I hate studying for many academic subjects. k8

8. I am good at combining ideas in ways that others have not tried. k9

9. I have generally done better in psychology courses than in other courses. k10

10. I have a poor vocabulary. k11

11. I like most academic subjects. k12

12. I wish I had more imagination and originality. k13

13. Psychology makes me feel inadequate. k14

14. I am an avid reader. k15

15. I have trouble with most academic subjects. k16

16. I enjoy working out new ways of solving problems. k17

17. I am quite good at psychology. k18

18. I do not do well on tests that require a lot of verbal reasoning ability. k19

19. I am good at most academic subjects. k20

20. I am not very good at problem solving. k21

21. I have trouble understanding anything that is based upon mathematics. k22

22. Relative to most people, my verbal skills are quite good. k23

23. I am not particularly interested in most academic subjects. k24

24. I have a lot of intellectual curiosity. k25

25. I have always done well in psychology classes. k26

26. I often have to read things several times before I understand them. k27

27. I learn quickly in most academic subjects. k28

28. I am not very original in my ideas, thoughts, and actions. k29

29. I never do well on tests that require psychological reasoning. k30

30. I am good at expressing myself. k31

31. I hate most academic subjects. k32

32. I am an imaginative person. k33

33. At school, my friends always came to me for help in psychology. k34

34. In school I had more trouble learning to read than most other students. k35

35. I get good marks in most academic subjects. k36

36. I would have no interest in being an inventor. k37

37. I have never been very excited about psychology. k38

38. I have good reading comprehension. k39

39. I could never achieve academic honours, even if I worked harder. k40

40. I can often see better ways of doing routine tasks. k41

Figure 57 SDQIII Self Description Questionnaire PSY

Codes

Codes	Illuminating examples of behaviour / activity/ phrases
Procrastination **(P)** Here I define procrastination as an activity that involves carrying out less urgent tasks in place of the homework study tasks	PGL group 3 - Even with the guide present, the students spent time hole punching documents, filing and organising separate files into sections, colour coding the sections of English Literature file! Students: P14 and P13 (DL group) Together the students spent 45 minutes generating a shopping list and discussing where to buy, and searching (via Wi-Fi) local stationery shops for an ART homework. Students P11 and P8 (DL group) 18 minutes discussing other people in the class, the remainder of the hour was spent sorting and collating (flipping through files) pieces of paper some for psychology and some for another subject (never mentioned it verbally).
Off task Chat or irrelevant response / behaviour that does not contribute to the task **(OC)**	Students: WC and IK (DL group) - These two students spent 38 minutes discussing the other students. Topics included the layout of the common room and students' clothes Students P11 and P8 (DL group) 18 minutes discussing other people in the class PGL Group 2- All: [Sharing jokes] Laugh P32: Yeh that's because you are drunk…. P31: Some of the time but not all…

Sharing personal views regarding the topic studied **(PE)**	PGL Group 2- P29: 'this topic is so dull' P32: 'yeh, totally…' P7: 'Yeh, yellow [refers to chapter of the text book] is dull, red is better ya think its bound together better…{name} says 'abnormal' is cool, that's purple…' PGL Group 1- P9: it's dead interesting…I love it …I am going to apply to do it [referring to UCAS application] PGL Group 1- P31 :If I hadn't have come to the induction day I wouldn't have taken it P9: How do you know it isn't going to get boring though like Philosophy, that is so deep…'
Probing Questions **(Q)**	PGL Group 1- the Guide {Name} for this group poses the following questions: How do you test whether they are valid…? What do you think that means? Can you work that out? Do you know what standard deviation actually is? PGL Group 1- WM: 'Ok dudes… discuss the advantages and disadvantages of these designs' PGL Group 2- P29: So what have you put for an advantage?

	P32: Is it different to that we learnt in biology?
Checking Knowledge / Verification **(K)**	Students P11 and P8 (DL group) L and LS (DL group) P8: 'Can you show me the flow chart, I'm not sure I copied it down' Students P11 and P8 (DL group) P8: Can I see your cheatie card on working memory {name} please PGL Group 1- P33 & P9 & P31 & P29: Discussion regarding the validity of studies case / lab P31: not sure if case studies are really valid P33: they are real people so that makes the study valid P9: is it about the study itself or the findings of the study P31 The jury is out P33 who cares P9 – it is an evaluation point if you care ! WR Nope
Talking about Learning - any factual information or reasoning or judgements **(L)**	Students P11 and P8 (DL group) P11: it's like a sparkler [explains the decay effect] the trace is there for a bit and then it is like gone forever P8: Yeh … I am…I'll…[looks for a drawing in her notes] P11: She said to draw a sparkler in our notes. Look a…[shows notes] P8: Cool yeh, I'll do a nice one…I need red and orange… PGL Group 1- P9: yeh…That's slightly different to… reliability isn't it … its like the opposite to validity so when a test is reliable it is not always valid or something?

Checking Understanding - showing the checking of knowledge in the affirmative **(U)**	PGL Group 1- In response to the statement above in (L): P33: It's like when she made us draw Ali G in our notes, mine is mint…, validity is about keepin' it real' Students P43 and P44 P44: Do you get the GRAVES thing? …Is it Ao3… is that all it is I thought it was harder than that…'
Talking about organising (learning and lessons) (meta-cognitive) **(MC)**	Report from the Guide {name} on Tuesday October 2nd 2012 the study 'went badly' and realistically only three of the group members did any learning'
Checking Learning skills **(L)**	Students P11 and 'P8' (DL group) P8: 'So what do we have to do? P8: 'when is it in for?' P11: Have you got enough on that one? P11: Have you got A02 as well as A01; I need to add some A03. PGL Group 2- {name} the guide, P29, P7, P32 show each other their files, admiring the poly-pockets they discuss the sequence of the work, compare numbers of stickers and self-report graphs, They spend 16 minutes flicking and re-filing and sequentially sorting their homework. They admire each other's files and are preparing for a file check.

Table 58 Codes and examples of activity observed in collaborative sessions

INTERVIEW Frame

Introductory statement creating a safe comfortable environment for the interviewee, Bryman (2008).	The following checklist is read to each interviewee: Thank you for agreeing to participate in this semi structured interview. It will not last more than 15 minutes. I am conducting a doctoral project into how students learn in their study sessions and will be writing this up as a thesis. I am collecting filmed data, interview data and data from questionnaires. I am interested in speaking to a number of students and you have been selected randomly from a list of 73 participants. You will not be identified in anyway by any of the readers and no one will be able to detect your answers as they are anonymised when they are entered into the computer for analysis. You are able to tell the complete truth. Your participation in this semi-structured interview is entirely voluntary and all details we discuss today and in the future will be held confidentially. If you do have any questions here is a card with my contact details if you would like to discuss anything further at a later date. (see Appendix)
Small talk and establishing rapport. The trick in Weiss's (1948) judgement is to present a concerned attitude expressed in a well-planned and encouraging format.	When meeting the interviewee: (For the first time) Take a few minutes to become acquainted, offer refreshments, thanking them for coming, discuss seating arrangements (side by side without a table) ask about transport arrangements, subjects at college, weather, lunch, or imminent college social gatherings.
1. Introductory questions	Please could you tell me about your study sessions? (Leaving significant breaks for silence)

2. Follow –up questions	Repeat significant words the interviewees use e.g.: So when you say it was 'mint' can you explain more about what you mean?
	<u>What happens</u> in the session that you would describe as effective?
3. Probing questions – study session and academic self-concept (Ordinal data) AC – Academic confidence AE – Academic effort AA – Academic achievement	Considering the discussions of some of the problems creating Likert-type scales I listened carefully to Hartley (2013) and carefully worded the items. On a scale of 1 strongly disagree to 5 strongly agree Having a friend to study with is useful. (AC) I am able to help my mates with their work. (AC) If I work hard I will get better grades. (AE) I miss more study sessions than I go to. (AE) Having a friend helps me. (AC) I often feel like giving up on psychology. (AC) I find working on my own easy. (AE) I find A levels easier than I expected. (AE) Having a study buddy has made me feel better about psychology. (AC) Most of the people on the course are smarter than me. (AA)
3a. Positive emotion, excitement, enthusiasm, academic self-concept	Can you describe what the session felt like for you when it was going well? What did it feel like when the study session was described as 'mediocre', weak or pointless?
4. Deepened knowledge	Could the session have deepened your knowledge? How could a session affect your learning of the subject? (
5. Specifying questions about deepening knowledge	Could the session have made you feel less confident – how? Have the study sessions confused your understanding? How do you know it is 'good' for you?
5a. 'Make	Cohen *et al.* (2011) suggest the dynamics of the interview

encouraging noises' (Cohen *et al.*, 2011, p. 425)	is important and the interviewer is responsible for keeping the interview moving forward, as well as positive signs of acceptance.
6. Direct questions (Yes / No) (Nominal data)	Do you always find it useful? Would you recommend a similar experience to other Yr 12 students? Do you think this (PGL, DL, AL) is the best way for you to study?
7. Direct questions about connections with others	Are there benefits for you to working with others / alone?
7a. Silence	Kvale (1996) suggested leaving pauses allowed time for interviewee reflection and enables a space for them to say more.
8. Five Adjectives in a sealed envelope	I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your study sessions. I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your knowledge and understanding of…………(insert subject e.g., psychology or ethics)
8a.Closing the semi-structured interview	Repeat some aspects of the introduction again: Thank you again for your cooperation – adds to the variety of data and collection of knowledge about being a student in the sixth-form. Really valuable insight. Share findings in September 2013. Give small present and thank you again.

Figure 59 Interview Frame

Invitation to interview

Title of Project: Academic self-concept, collaborative learning - Bridging the gap at post 16.
Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Dear Parents and Student,

Thank you for taking an interest in the way students learn. What my doctoral study looks at is how students learn when they enter 6th form; It looks at bridging the gap between GCSE and AS study to **assist the transition for students.**

A random list of participating students was generated and your name came up!

I wondered if I might <u>invite you to attend a short interview</u> (15 minutes max) which will allow me to ask you some personal questions about your study sessions and your experiences entering sixth-form study.
A small thank you for your time will hopefully compensate for your valued input to my study.

The interview will be audio recorded for my own transcripts.
☺ Refreshments will be provided ☺

May I remind you that all of the information you share will be held privately, anonymously and confidentially. There is no pressure to attend this interview if you feel you don't want to participate.

✂………………………………………………………………………………………
Please indicate your availability by completing the attached form:
☐   I consent to an interview lasting max 15 minutes
☐   Please contact me to arrange an appropriate time

Name ……………………………………………………………………………….
contact me on ☎ …………………………………………………………………
or I prefer to be contacted via
email……………………………….…………………………………….

Figure 60 Letter to interviewees

Self- Selection of guided learning groups

Title of Project: Academic self- concept, collaborative learning -bridging the gap at post 16.

Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Dear Participant,

Thank you very much for volunteering to participate in the guided learning groups. This information is for you to keep as a reference.
I am conducting research on how students learn when they enter 6th form; It looks at bridging the gap between GCSE and AS study to **assist the transition for students.** One of the factors I am investigating is whether collaborative learning strategies can assist a student's transition and academic self-concept.

Please note the following:

Guided learning is one of the oldest forms of education (Socrates was a master!) He didn't tell his students the answer he used open and leading questions to GUIDE his students into their self discover of knowledge – remember the training video you watched.

Guides do not teach, they are there only to facilitate learning: they do not give you the answers and are there only to assist.

You will not be required to participate in no more than ONE session per week for 12 weeks. The session should last ONE hour (55 mins min). The groups should accommodate 5 students (max) at a time

All sessions will be **<u>filmed</u>**, but please act normally the footage will be kept completely confidential and will be shown only to my supervisor at the University. Please note that your identity will be held confidential and will not be revealed under any circumstances.

Please confirm that you have parental permission to participate in one of your free or study session per week.

Please confirm you give your consent to filming for 12 weeks by signing below.

Thank you so much for your time and cooperation.

………………………………………….   ……………/09/2012
Name of Participant   Date of consent

Guided learning GROUP

Please indicate your free study sessions by marking the <u>potential periods</u> you have available with a ☺
Please remember you will only be asked to participate in ONE session per week
The GUIDE we have chosen that fits our timetable is

……………………………………………………………….(Name of GUIDE)
Our Group is
1……………………………………………………………. (Name)
2……………………………………………………………. (Name)
3……………………………………………………………. (Name)
4. ………………………………………………………….(Name)
5…………………………………………………….…(Name)

We will meet for 12 weeks in the upper filming room on:

Period/ Day	MON	TUES	WED	THURS	FRI
1					
2					
3					
4					
5					
After College					

Figure 61 Selection of groups form

PPT presentation to guides

Figure 62 Presentation to guides

Information for Guides

Title of Project: Academic self- concept, collaborative learning -Bridging the gap at post 16.

Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Dear Guide,

Thank you very much for volunteering to assist as a GUIDE in a guided learning session. This information is for you to keep as a reference.
I am conducting research on how students learn when they enter 6th form; It looks at bridging the gap between GCSE and AS study to **assist the transition for students.** One of the factors I am investigating is whether collaborative learning strategies can assist a student's transition and academic self-concept.

Please note the following:

Guided learning is one of the oldest forms of education (Socrates was a master!) He didn't tell his students the answer he used open and leading questions to GUIDE his students into their self discover of knowledge – remember the training video you watched.

Guides do not teach, they are there only to facilitate learning: please ASK QUESTIONS rather than give answers.

You will not be required to guide more than ONE session per week for 12 weeks. The session should last ONE hour (55 min). The groups should accommodate 5 students (max) at a time
All sessions will be filmed, but please act normally the footage will be kept completely confidential and will be shown only to supervisors at the University. Please note that your identity will be held confidential and will not be revealed under any circumstances.

Please confirm that you have parental permission to act as a guide in one study session per week.
Please confirm you give your consent to filming and acting as a guide for 12 weeks by signing below.

Thank you so much for your time and cooperation.

……………………………………………   ……………/09/2012

Name of Guide   Date of consent

Guided learning GUIDES

Please indicate your free study sessions by marking the <u>potential periods</u> you have available with a ☺

Please remember you will only be asked to guide ONE session per week

My timetable……………………………………………… (Name)

Period/ Day	MON	TUES	WED	THURS	FRI
1					
2					
3					
4					
5					
After College					

Figure 63 Information for Guides

Interim debrief sheet for Participants
Date…………2012/13

Title of Project: Academic self- concept, collaborative learning -Bridging the gap at post 16.
(Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Thank you for participating in the study for the last 12 weeks. I am very grateful that you and your parents said that you were happy to take part and that you are willing to continue to take part. This sheet reminder information about the purpose of the study and lists my contact details in case you need to ask more questions.

Reminder: What is the purpose of this study?

This study has been looking at how students learn when they enter 6th form; It will continue to look at bridging the gap between GCSE and AS study to assist the transition for students.
As you know your study sessions have been filmed once a week and the content will now be analysed. Following each study session you have been asked to complete a self- evaluation sheet.

You have also completed a questionnaire which will ask questions about your feeling of academic self-concept. (This is how you feel about your ability to do your subject). You will be asked to complete the same questionnaire in 3 months, 6 months and then in 9 months time.

All of your answers will continue to be confidential and anonymous – your teachers, parents and peers will not find out anything about them. Your questionnaires have been collected, and are stored safely at Northumbria University. Your name will not be written on the questionnaire (I use code numbers instead).

This study has been approved by Northumbria University Ethics Committee however if you have any further questions, please ask. If you'd prefer, you can ask questions in private without anyone hearing. You are also able to ask questions after the study is complete. Please contact me on my email address if you would prefer (see below)

Remember, you do not have to take part if you don't want to. If you decide to take part, but then change your mind when you start answering the questionnaire that is fine. Even after you have completed the questionnaire, you change your mind – just ask me to delete your data.

Further contact details:
(Details removed for Appendix confidentiality)

Figure 64 Interim Debrief sheet

Letter of invitation to participants

Title of Project: Academic self- concept, collaborative learning -Bridging the gap at post 16.

Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Dear Parents and Student

Thank you for taking an interest in the way students learn. What this study looks at is how students learn when they enter 6th form; it looks at bridging the gap between GCSE and AS study to **assist the transition for students.**

There will be an information session on **Tuesday 11th September 2012 held in the PSYCHOLOGY classroom 4.00- 5.15**

This is an information evening to:

- ☺ Help you decide whether you would like to take part in the study
- ☺ and which group you are more suited to.

- ☺ Inform and allow discussion of parents and carers enabling all to be fully aware of the study's aims and objectives.

- ☺ To meet potential Guides in Yr 13.

- ☺ To network with other psychology students at (School name removed).

The study takes place during your study periods and will involve using **only ONE** of your allocated study periods PER WEEK.

☺ Refreshments will be provided☺

✂..
Please indicate your availability by completing the attached form:
☐   I will be able to attend on **Tuesday 11th September 2012 at 4.00-5.15**
☐   I will not be able to attend but I would like further information please
contact me on   ……………………………………………
or email……………………………………………….

Figure 65 Letter to participants to participate in the briefing

Information handout for students

Title of Project: Bridging the gap at post 16.
Name of Researcher: Celia Bone (BSc (Hons), MA, MBPsS).

Dear Student,

Hi there ! My name is Celia Bone and I am a teacher of Psychology at (School name removed for Appendix). I am conducting research on how students learn when they enter 6th form; It looks at bridging the gap between GCSE and AS study to **assist the transition for students.**

Please note the following:

This is NOT a test, but a questionnaire for which you have the answers to every question.

There are NO right and wrong answers.

Questions relate to how you feel about the activities in learning. Your opinion is required.

Please do not write anything else on the questionnaire except your response.
Please write your response 1-6 on the dotted line provided at each question.
Please only choose ONLY ONE response to every question.
Please provide a TRUTHFUL response to each question.
Please note that your identity will be held confidential and will not be revealed under any circumstances.
All of your responses will be treated confidentially.
Thank you so much for your time and cooperation.
The questionnaire should only take a few minutes of your time.

Most kind regards.

Figure 66 Handout to accompany the ASC SDQ-III
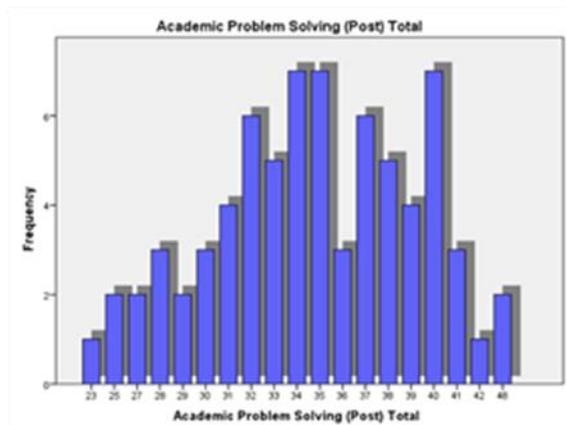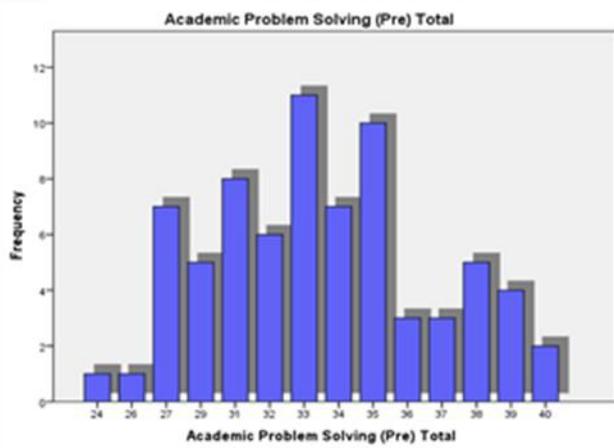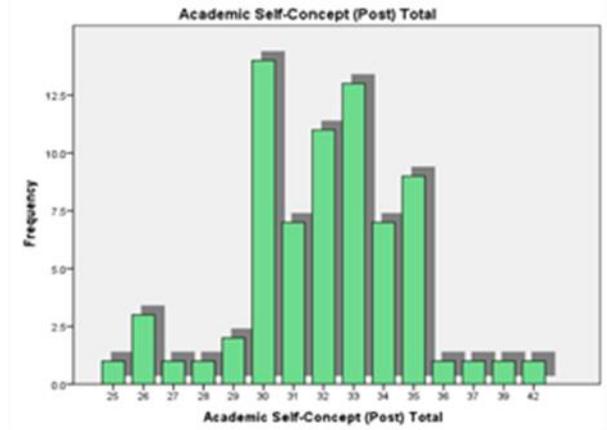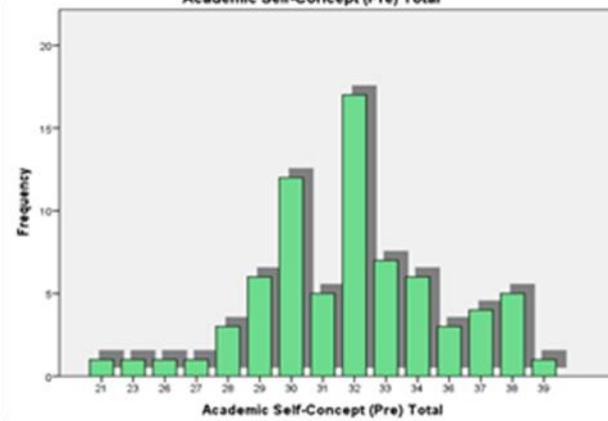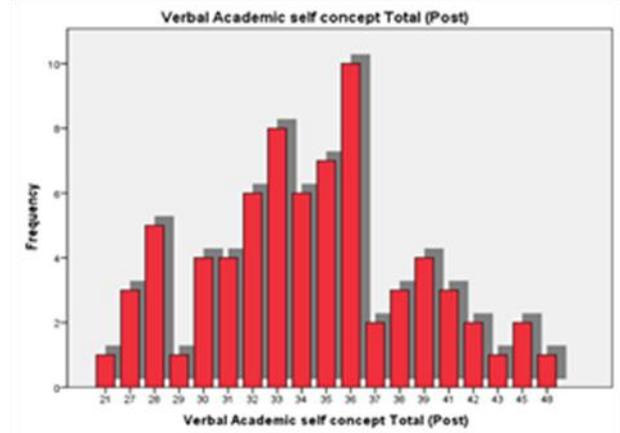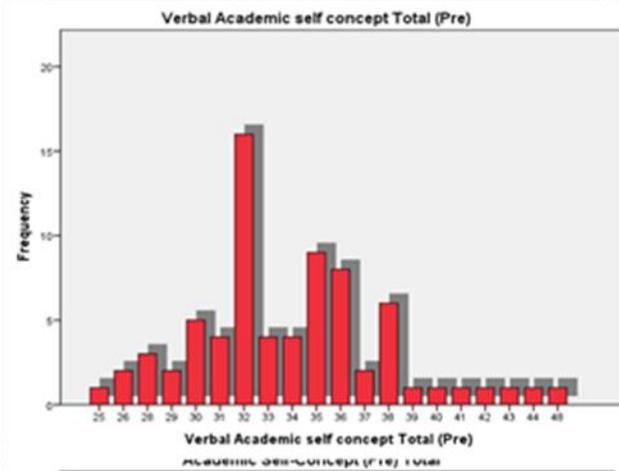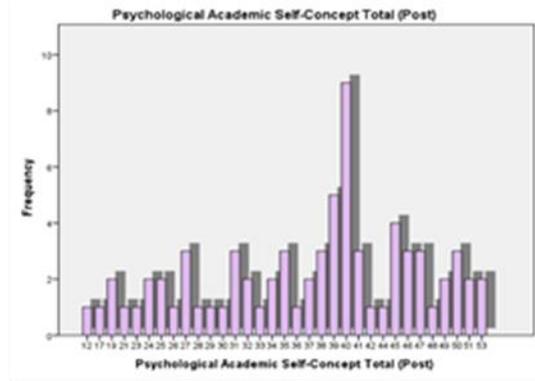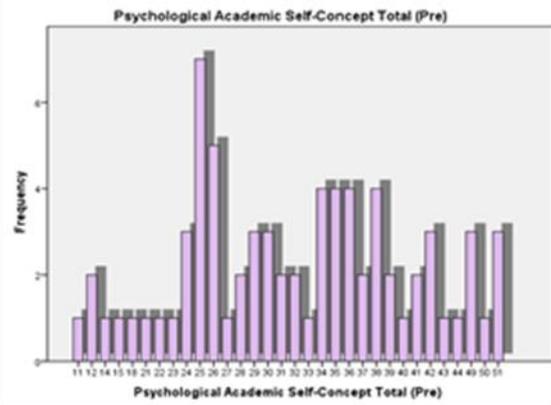
Figure 67 Normal distribution graphs for subscales

Question 4 & 5 responses

Question 4 Could the session have deepened your knowledge?

Question 5 Could the session have made you feel less confident – how? (Make encouraging noises)
Have the study sessions confused your understanding?
How do you know it is 'good' for you?

DL

DL Participant 42

4; Probably by going over something I don't understand and it helped remember a lot more

5:It didn't confuse me and I don't think it broke my confidence I just think I could have used the time more usefully

DL Participant 11

4:Yeh I think so, helping me to remember more and explore it more but when you talk about it and give examples helps… you to feel more related to the subject and the topic… to have an example in your head you can compare it to recent events. Things that have happened and psychology is always good banter… we talk a lot about what we are learning in the common room. To have an example in your head helps you to have embedded complex issues

5: Didn't but if we were both lost and if I didn't get it was above us then.

AL

AL Participant 36
4:Yes, I think it could, revising stuff you have already learned. If it was a study you hadn't covered in class that would deepen your knowledge, or your understanding and writing another study in the exam – say if you dint know about the cognitive interview and … and anyway I prefer to write something down not just read it.

5:If I had had a bad session it could have made me feel as if I hadn't learnt something. It could perhaps confuse you. AL is good for me comparing it to other methods 'coz I know that I get distracted by others and what they are doing.

AL Participant 17

4: Probably could have but it doesn't always… feel like I could have been better… working on my own I could look up new things a couple of times I taught myself something new when really I thought I cant really look in the cat book. When you made us do the pre reading it did help coz when you explained it in the lesson I felt I had already done it, but reading without an explanation I don't get it at all so that means I don't look in the cat book much.

5: Yes I think so as well as the reading I didn't know what SIT and CI meant on your lists so …and all of the other abbreviations…. and so I was confused and frustrated

PGL

PGL Participant 24
4:Tough one to a certain extent – it would have if we were going ahead – it was sort of rehearsing it a good revision activity session – it might help for the guide to PRE teach the lesson a bit too (at a basic level)

5:No, more confident if anything – coz she knew what was coming up… I can't think of any reason why it would make me feel less confident.

PGL Participant 7
4: Yes, defo… coz it gives you an insight into what you may never think of it's like you were analysing stuff from 5 books with 5 different opinions and you get immediate access to those opinions… yeh, that's what it's like.

5: Sometimes… because our group has bold personalities and if someone's not right I feel I cant really say… but I am me and I am not going to give up which makes me sure about what I know and check with the cat book and the internet to see what is right.

PGL Participant 33

Definitely you are either struggling with somethin'… coz you can get someone to explain it in a different way, you revise it with the group and you understand the topic better.

4: Re-assurring – if they know what it is they can explain it is nice to see and I like it when they say I don't understand I can explain it coz when you have to explain it to others it helps you to understand it better.

5: No, never. Not for me personally, I never felt it went badly

Figure 68 Responses to Question 4 and 5- deepening Knowledge

Participant 42 (DL) female

1. Intro   Please could you tell me about your study sessions?
Erm, well I would usually turn up and wait half and hour and she tended not to turn up so mostly I was working on my own.

2. Follow –up questions   Repeat significant words the interviewees uses e.g.:
So when you say it was '..........' can you explain **more** about what you mean?
What happens in the session that you would describe as effective?

When it was effective we would do a piece of homework together and write like a mind map or something working the whole hour, which was really good. I would ask her if she didn't understand and we would ask each other to explain things to each other

3. Probing questions –academic self-concept   On a scale of 1 strongly disagree to 5 strongly agree

1. Having a friend to study with is useful. (AC)………2………………………..
2. I am able to help my mates with their work. (AC)…3………………………
3. If I work hard I will get better grades. (AE)…………1……………………..
4. I miss more study sessions than I go to. (AE)………3………………………
5. Having a friend helps me. (AC)……………2…………………
6. I often feel like giving up on psychology. (AC)………4………………………
7. I find working on my own easy. (AE)………………2……………….
8. I find A levels easier than I expected. (AE)………2………………………
9. Having a study buddy has made me feel better about psychology. (AC)………3……………
10. Most of the people on the course are smarter than me. (AA)……………3…………………….

3a. Positive emotion, excitement, enthusiasm, academic self-concept   Can you describe what the session felt like for you when it was going well?

What did it feel like when the study session was described as 'mediocre', weak or pointless?

I felt I had wasted time and felt like I could have done a lot more and this made me feel disappointed, and made me feel I had achieved something – when we didn't have anything to do we did some pre learning – this made us more confident – I still remember Christiansen and Hubinette coz it refreshed my memory and I can still remember talking about it.

4. Deepened knowledge

     Could the session have deepened your knowledge?

How could a session affect your learning of the subject?

Probably by going over something I don't understand and it helped remember a lot more

5. Questions about deepening knowledge

Could the session have made you feel less confident – how? (Make encouraging noises)

Have the study sessions confused your understanding?

How do you know it is 'good' for you?

It didn't confuse me and I don't think it broke my confidence I just think I could have used the time more usefully

6   These are **Yes / No answers**

Do you always find it useful?...........**NO**........................

Would you recommend a similar experience to other Yr 12 students?.............**YES**.............

Do you think this (PGL, DL, AL) is the best way for you to study?.........**NO**.......................

7.connections with others   Are there benefits for you to working with others / alone, what are they do you think? (Leave silence to think)

Well you hear everyone else's ideas and it makes you think oh that's a really good idea and go off their ideas and create more by springing off their ideas

In psychology it would be quiet and I would prefer it to be quiet, I have used all types of learning Dyadic and peer guided.

8.Five Adjectives in a sealed envelope   This is the last task…

I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your study sessions.

I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your knowledge and understanding of……………(insert subject e.g., psychology, sociology or ethics)

347

we are going to seal the envelope and if you agree to come back in 3 months we can do the same again then…

9.Closing the semi-structured interview   Repeat some aspects of the introduction again:
Thank you again for your cooperation – adds to the variety of data and collection of …

Figure 69 'P42' (Female) (DL) Semi-structured interview

Participant 24 (Male PGL)

Please could you tell me about your study sessions?
I found it quite useful overall how you got input from someone who had already learnt the topics and she could almost already put you ahead – so it was a bit more reinforced when it came to the lesson time and but although sometimes you get off task when you learn with other people I find it easier to get down and do some work and find it hard to get down 'head down' as it bores me a bit it helps me to get through it better…

Is it hard for you to focus on your own? But is it easier to do it with others?
But there is another side to it where you can sit and chat, but in our study session, we managed to get a bit of both done – a bit of a chat and then we did get the work done at the end of the day. Sometimes I went to the catty side of the library where I felt not completely on my own and felt at least I was having a go at some of my work and that made me feel better,

Is this a good climate?
I would say that if I didn't go to thee sessions I would have been even further behind. Because I found it made me do something with other people when I have got friends saying we have that study session to do today it is better than festering in the common room

I am positive about the study sessions
2. Repeat significant words the interviewees uses e.g.: So when you say it was '……….' can you explain **more** about what you mean?
What happens in the session that you would describe as effective?
We would all get in there and look at what we needed to do … like homework or précis and look ahead to see what is needed things like that so someone had missed a lesson or it would help it to get engrained in your mind to help someone else understand it. When you have done some work have a bit of chat, stay for the whole hour
Can you describe what the session felt like for you when it was going well?
What did it feel like when the study session was described as 'mediocre', weak or pointless?

Uplifting to know I would get work done otherwise it wouldn't have been done at all – coz of other distractions the guide kept us better to keep on task… there were a few times she wanted to chat, but she kept us on task …
When it was bad – could have done a lot more and put me in a worse position for the lesson feeling less in tuned with what we are actually doing… reading ahead makes me feel good, I don't do it much – it makes you feel clever

Could the session have deepened your knowledge?
How could a session affect your learning of the subject?

Tough one to a certain extent – it would have if we were going ahead – it was sort of rehearsing it a good revision activity session – it might help for the guide to PRE teach the lesson a bit too (at a basic level)

Could the session have made you feel less confident – how? (Make encouraging noises)
Have the study sessions confused your understanding?
How do you know it is 'good' for you?

No, more confident if anything – coz she knew what was coming up… I can't think of any reason why it would make me feel less confident.
Do you think this (PGL, DL, AL) is the best way for you to study?.............**YES**...................

What Are there benefits for you to working with others / alone, what are they do you think? (Leave silence to think)

Getting it done coz I have no motivation at home and not much better here or in the library and helps you to help you get it with a bit of banter with your mates
This is the last task…

These are **Yes / No answers**
Do you always find it useful?...........**YES**........................
Would you recommend a similar experience to other Yr 12 students?.............**yes**.............

I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your study sessions.
I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your knowledge and understanding of……………(insert subject e.g., psychology, sociology or ethics) we are going to seal the envelope and if you agree to come back in 3 months we can do the same again then…

Figure 70 'P24' (male) (PGL) Semi-structured interview

Paricipant 7 (PGL female)

Please could you tell me about your study sessions?
**Well I started it at school and it didn't seems to work as well as I thought…
it agitated me …we (well our table) met 2 days before in Starbucks and it
was less formal and get a coffee and was great bounce ideas off each
other. When you revise on your own… Holly said that… that THIS gives a
deeper insight and deeper understanding to the topic. In a group you all
think differently and it wouldn't be the same if it was just 2 people and get
loads of people's points of view if they are wrong it makes you think more
about why it is wrong and how you can back yourself up with the right
back up.**

Repeat significant words the interviewees uses e.g.: So when you say it was
'……….' can you explain **more** about what you mean?
<u>What happens</u> in the session that you would describe as effective?

**For me I like things to be in order we have to be on task straight away it
has to be productive, not a lot done but in great depth so it was really
getting to the point {gestures finite detail} so it was getting to the point
quite quickly if you wanted to clarify something. Also if you cold feel like
you have a lot of information from it then it was totally effective – even if
you can do only one study in great detail.**

On a scale of 1 strongly disagree to 5 strongly agree
Having a friend to study with is useful. (AC)………5………………………..
I am able to help my mates with their work. (AC)…4……………………….
If I work hard I will get better grades. (AE)…………5……………………
I miss more study sessions than I go to. (AE)………2……………………….
Having a friend helps me. (AC)……………4………………….
I often feel like giving up on psychology. (AC)………1……………………….
I find working on my own easy. (AE)………………4……………….
I find A levels easier than I expected. (AE)………3……………………….
Having a study buddy has made me feel better about psychology.
(AC)………5……………
10 Most of the people on the course are smarter than me.
(AA)……………3…………………

Can you describe what the session felt like for you when it was going well?
What did it feel like when the study session was described as 'mediocre', weak
or pointless?
**When it went well – calm…Can contribute and feel confident…Stay there
and felt comfortable Not going well; erm…Agitated, got somewhere better
to be… I feel I need to be able to change it to be better.**

Could the session have deepened your knowledge?
How could a session affect your learning of the subject?

**Yes, defo… coz it gives you an insight into what you may never to think of
it's like you were analysing stuff from 5 books with 5 different opinions and
you get immediate access to those opinions… yeh, that's what it's like**

Could the session have made you feel less confident – how? (Make encouraging noises)

Have the study sessions confused your understanding?

How do you know it is 'good' for you?

Sometimes… because our group has bold personalities and if someone's not right I feel I cant really say… but I am me and I am not going to give up which makes me sure about what I know and check with the cat book and the internet to see what is right.

These are **Yes / No answers**

Do you always find it useful?...........**NO,** ....

Would you recommend a similar experience to other Yr 12 students?.............**YES if I get it right**.............

Do you think this (PGL, DL, AL) is the best way for you to study?.........**Don't know**.......................

Are there benefits for you to working with others / alone, what are they do you think? (Leave silence to think)

Yes it allows me not to have to read everything reading is not my strong point {dyslexia}… I like to watch a film with others like the 12 Angry Men and I like to bounce ideas and teaching each other and occasionally drop something into the conversation helps to keep it all alive.

Figure 71 'P7' (female (PGL) Semi-structured interview

Participant 36 (Female AL)

1. Please could you tell me about your study sessions?
Some sessions were more productive than others… I did mainly cheatie cards and the homework I did that with (name) we sat together if she was there and if we deeded any help we did interact. It was difficult at first coz I didn't know exactly what to do so I sit at the table at home and watch the TV and it depends on what I am working on

2. Repeat significant words the interviewees uses e.g.: So when you say it was '………..' can you explain **more** about what you mean?
<u>What happens</u> in the session that you would describe as effective?
Do some cheatie cards – do quite a few rather than one or two – feel confident and know that I understood it, the confidence that I knew it made it effective. Once the work is finished then I could refer to it… and us them in class, I also showed them to (name) which I liked.

3,on a scale of 1 strongly disagree to 5 strongly agree
Having a friend to study with is useful. (AC)………3………………………..
I am able to help my mates with their work. (AC)…3……………………….
If I work hard I will get better grades. (AE)…………1…………………….
I miss more study sessions than I go to. (AE)………3……………………….
Having a friend helps me. (AC)……………2………………….
I often feel like giving up on psychology. (AC)………4……………………….
I find working on my own easy. (AE)………………3……………….
I find A levels easier than I expected. (AE)………5……………………….
Having a study buddy has made me feel better about psychology. (AC)………3……………
10. Most of the people on the course are smarter than me. (AA)……………3…………………

4. Can you describe what the session felt like for you when it was going well?
What did it feel like when the study session was described as 'mediocre', weak or pointless?
When it went well – I felt good in myself, happy and a real sense of achievement and a sense of achievement are important when it was not good, there was no development the negative to good the opposite really.

4a. Could the session have deepened your knowledge?
How could a session affect your learning of the subject?
Yes, I think it could, revising stuff you have already learned. if it was a study you hadn't covered in class that would deepen your knowledge, or your understanding and writing another study in the exam – say if you dint know about the cognitive interview and … and anyway I prefer to write something down not just read it.

Could the session have made you feel less confident – how? (Make encouraging noises)
Have the study sessions confused your understanding?
How do you know it is 'good' for you?

If I had had a bad session it could have made me feel as if I hadn't learnt something. It could perhaps confuse you. AL is good for me comparing it to other methods coz I know that I get distracted by others and what they are doing

6. These are **Yes / No answers**
Do you always find it useful?...........**NO, not all the time**.......................
Would you recommend a similar experience to other Yr 12 students?.............**YES**.............
Do you think this (PGL, DL, AL) is the best way for you to study?.........**Yes I am convinced**.......................

7.Are there benefits for you to working with others / alone, what are they do you think? (Leave silence to think)
It tests my own knowledge and then I know what I have to find out, I research it if I don't know it.

This is the last task…(same as all other interviews)

Figure 72 'P36' (female) (AL) Semi structured interview

'Participant '11' (DL) Female

1.Please could you tell me about your study sessions?

Well we did most of your work rather than Miss E's, a bit of procrastination was needed it helped us to talk. It helped to talk to her about what she didn't understand and it helped to … by saying it out loud. Helped her to know what I was understanding better. If you know what I mean { consolidate? } yes that's the word consolidate. She thought I was better than she was and she asked me to explain the working model… she had some gaps it helped her

{Do you think it helped Lauren ?} – better for L……. coz she thinks she knows less and so it is good to have someone to build your self confidence{Do you think it helped L…….. ?} – better for L……… coz she thinks she knows less and so it is good to have someone to build your self confidence

2. Repeat significant words the interviewees uses e.g.: So when you say it was '………..' can you explain **more** about what you mean?

<u>What happens</u> in the session that you would describe as effective?

Well we didn't do always what we had to do but we went down the précis list – a good session is when we did 6 or 7 on the list reading through the book, discuss it and then go off topic a bit, going on our phones a lot and then writing the cheatie card up. Phones featured a lot , but we did do stuff.

3. On a scale of 1 strongly disagree to 5 strongly agree

Having a friend to study with is useful. (AC)………4………………………..

I am able to help my mates with their work. (AC)…4……………………….

If I work hard I will get better grades. (AE)…………5……………………

I miss more study sessions than I go to. (AE)………1……………………….

Having a friend helps me. (AC)……………4………………….

I often feel like giving up on psychology. (AC)………1……………………….

I find working on my own easy. (AE)………………2……………….

I find A levels easier than I expected. (AE)………2………………………

Having a study buddy has made me feel better about psychology. (AC)………4……………

Most of the people on the course are smarter than me. (AA)……………2…………………

3a.Can you describe what the session felt like for you when it was going well ?

What did it feel like when the study session was described as 'mediocre', weak or pointless?

When it went well – we had both done a lot. Clarification – it felt good to understand it and more confident. When we had to pre learn it felt really good coz it made me feel excited to know the stuff easier and helped to grasp it better. I felt clever

Sometimes the book is a bit too wordy and you but it easier in class and the book seems to make it sound more difficult than it actually is.

4. Could the session have deepened your knowledge ?

How could a session affect your learning of the subject?

Yeh I think so, helping me to remember more and explore it more but when you talk about it and give examples helps… you to feel more related to the subject and the topic… to have an example in your head you can compare it to recent events.. things that have happened and psychology is always good banter… we talk a lot about what we are learning in the common room. To have an example in you head helps you to have embedded complex issues

5. Could the session have made you feel less confident – how? (make encouraging noises)
Have the study sessions confused your understanding?
How do you know it is 'good' for you?
Didn't but if were both lost and if I didn't get it was above us then didn't but if we were both lost and if I didn't get it was above us then

6. These are **Yes / No answers**
Do you always find it useful?...........**NO,** ....
Would you recommend a similar experience to other Yr 12 students?.............**YES**.............

Do you think this (PGL, DL, AL) is the best way for you to study?.........**No**........................

7. Are there benefits for you to working with others / alone, what are they do you think? (leave silence to think)
For me – being able to discuss it coz the best way is to TELL others and it makes me feel I've got it more, to discuss it with others is great for me. Helps to motivate me to do more work and then start work, I then look forward more to the lesson and feel more motivated before the lesson

This is the last task…
8. I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your study sessions.
I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your knowledge and understanding of…DL…………(insert subject e.g., psychology, sociology or ethics) we are going to seal the envelope and if you agree to come back in 3 months we can do the same again the Repeat some aspects of the introduction again:
Thank you again for your cooperation – adds to the variety of data and collection of knowledge about being a student in the sixth-form. Really valuable insight.
Share findings in September 2013Give small present and thank you again

Figure 73 'P11' (DL) Semi-structured interview

'Participant 29' (AL) female

1. Please could you tell me about your study sessions?
We would usually spend time with J……. coz we had the same study periods together – we went to the quiet area in History the library upstairs is too noisy. For Psychology if we had the précis list to do one would do one and talk about it and message each other to do some of the sheets we had to do. Sometimes we didn't always go together, so we were not always together J……. is not always in.
I found on my own is easier there is no-one distracting me and it is nicer to work by myself instead of constantly thinking of whether J……. is getting it and I focus on my own ideas – I cant work with music or chatting I need peace and quiet.

2. Repeat significant words the interviewees uses e.g.: So when you say it was '………..' can you explain **more** about what you mean?
What happens in the session that you would describe as effective?
Alone and in a warm room not too bright – not all the lights on and it has to be really quiet. The noise from the movement from class to class {gestures commotion of students} with the younger ones is really distracting too.

3. On a scale of 1 strongly disagree to 5 strongly agree
Having a friend to study with is useful. (AC)………4………………………..
I am able to help my mates with their work. (AC)…4………………………
If I work hard I will get better grades. (AE)…………5……………………
I miss more study sessions than I go to. (AE)………1……………………….
Having a friend helps me. (AC)……………4………………….
I often feel like giving up on psychology. (AC)………5……………………….
I find working on my own easy. (AE)………………5……………….
I find A levels easier than I expected. (AE)………1………………………
Having a study buddy has made me feel better about psychology.
(AC)………3……………
10. Most of the people on the course are smarter than me.
(AA)……………4…………………

4. Can you describe what the session felt like for you when it was going well ?
What did it feel like when the study session was described as 'mediocre', weak or pointless?
When it went well – I was happy wit my progress I feel like I have accomplished something or that I'd just managed to get work done

5. Could the session have made you feel less confident – how? (make encouraging noises) Have the study sessions confused your understanding? How do you know it is 'good' for you?
When it was weak – I felt what's the point, a bit depressed about it and not feeling I was going to give up though.

Yes I think so as well as the reading I didn't know what SIT and CI meant on your lists so …and all of the other abbreviations…. and so I was confused and frustrated

These are **Yes / No answers**
Do you always find it useful?...........**NO,** ....
Would you recommend a similar experience to other Yr 12
students?.............**YES**.............
Do you think this (PGL, DL, AL) is the best way for you to study?.........**Yes**
....

6. Are there benefits for you to working with others / alone, what are they do you think? (leave silence to think)

Being able to completely focus
Use own ideas as well
Not having to think about others' ideas
Not relaxing but time to think and work at my own rate..

This is the last task… as per all interview…

Figure 74 'P29' (AL) Semi structured interview

'Participant 33' (PGL) Female

1. Please could you tell me about your study sessions?
Really good, at times not always productive, working with someone who understands and you connect with them, I wasn't nervous at all.
When we.. we knew the camera was there the whole time and this meant … we were more motivated to work better, I enjoyed it {nodds} and I felt really helped. Last week we worked on a stats poster together – it was good coz other people's ideas… they had it and then Amy gave all of her ideas – for revision I looked back at that sheet and used it as a cheatie card in some sessions… yeh that was good.

2. Repeat significant words the interviewees uses e.g.: So when you say it was '………..' can you explain **more** about what you mean?
<u>What happens</u> in the session that you would describe as effective?
We did. The first set of précis cards 1-25 as a group – 10 by ourselves and use others to do a few together- you know, swap each others and used it to copy up at home. This method of revising for the test was better than other lessons and you don't have a camera watching you – it is almost like having a teacher sitting in on you. Like a higher power (laughs). You … we ere aware that the teacher is going to see all of what we did and what was said. Amy tended to lead if we weren't doing too much, it might look like she is not doing anything but she was a good influence.
You mentioned you used Cheatie cards – yes I realised that cheatie cards for other lessons as well, talking all lesson – I can't learn like that- we use lots of different ways

I feel that out of all of the subjects I feel I have understood and coz I am being supported it helps me to do well
As a shy person, yes I am shy, this may not be as effective and might be difficult to be by you to being in a group.

3. On a scale of 1 strongly disagree to 5 strongly agree
Having a friend to study with is useful. (AC)………4………………………..
I am able to help my mates with their work. (AC)…3……………………….
If I work hard I will get better grades. (AE)…………5…………………….
I miss more study sessions than I go to. (AE)………2………………………
Having a friend helps me. (AC)……………5………………….
I often feel like giving up on psychology. (AC)………1……………………….
I find working on my own easy. (AE)……………….3……………….
I find A levels easier than I expected. (AE)………1……………………….
Having a study buddy has made me feel better about psychology. (AC)………4……………
10 Most of the people on the course are smarter than me. (AA)……………3…………………

3a Can you describe what the session felt like for you when it was going well?
What did it feel like when the study session was described as 'mediocre', weak or pointless?
I felt better about myself – if I was productive it made me a little encouraged and happy, Supported nice better about coming to college and I don't want to come if I know others like me are struggling

I don't think we had a bad session… you do wonder though that when it is done that you haven't put as much input and you've said something wrong it doesn't matter, things that we…you could go over next time, for example you can ask questions to each other

4. Could the session have deepened your knowledge?
How could a session affect your learning of the subject?
Definitely you are either struggling with something'… coz you can get someone to explain it in a different way, you revise it with the group and you understand the topic better

Re-assurring – if they know what it is they can explain it is nice to see and I like it when they say I don't understand I can explain it coz when you have to explain it to others it helps you to understand it better.

5. Could the session have made you feel less confident – how? (Make encouraging noises)   Have the study sessions confused your understanding? How do you know it is 'good' for you?
No, never. Not for me personally, I never felt it went badly

6. These are **Yes / No answers**
Do you always find it useful?...........**YES**........................
Would you recommend a similar experience to other Yr 12 students?.............**YES**.............
Do you think this (PGL, DL, AL) is the best way for you to study?.........**YES**.......................

7.Are there benefits for you to working with others / alone, what are they do you think? (Leave silence to think)
I tried working alone and swapped to this group after one session and knew it worked when I felt positive about it

8. This is the last task…
I would like you to write a describing word on each of these FIVE PINK pieces of card that accurately describe how you feel about your study sessions.
………….. As per all other interviews

Figure 75 'P33' (PGL) Semi structured interview

Group interview transcript
Please check the transcript and return with your annotations to me in the envelope provided
Many thanks

Group Interview Tuesday 28th May 2013
Participant's names are coded here for confidentiality
M - PGL
S - PGL
J- PGL
G - AL

S	6.08	What shall we do now What exactly happens in a study session that makes it useful?
G		What exactly happens in a study session that makes it useful?
J		For Revision.. yeh ?
M	6.45	What happens in each context? Go on (name) what do you do ?
G		What happens in each context? Well I sit by myself and revise and if I need to ask someone I ask (name), but she is not really helpful really
S and M		Laugh
G		Why what do **you** do ?
M		Well, what **did** we do…I don't think it worked that well…we got distracted a bit too much we do…
S		I'm not sure whether it really helped that much, coz by the time we got distracted…
J	7.09	Did you do a group one ?
M		Yes, with (name) and (name), but when it was good…
S		Sometimes it was good, Sometimes it did work when we did work it was good then it was alright
G		Did you not get too distracted, I'm not sure I could concentrate…
S		No…Yeh, coz I thought …didn't we originally have a couple of us and the 3 of us and we just end up saying right yeh.. shut up.. like Adam and Will wanted to a group on their own, but then he came once and he told
M		Yeh, like me and (name) and then (name) and (name) came ... did (name) stay with us ?
S		He came once and told Will off the whole time
S		Who did you do your peer one with ?
J	8.10	Us, well (name) um (name) and eh I think that was it. Actually ... a few people dropped out, (name) dropped out and (name) dropped out..
M	8.50	What exactly makes the study session useful?
J		Useful hmm, right?
G		If you actually revised,
S	8.59	Right, If you have a set hour, or like I can't really be bothered to do it this week,
M		Structured…. The place you do it in…. .coz we did it in that room didn't we, that was better
J		Yeh

G		What makes the study session **un**successful ?
S		If there is too many people in the group
G		Yeh, if there are…..you can't concentrate and you don't learn anything
M		Get distracted… all the time… Hmmm [laughs]
J	9.10	Yeh, sounds good.. [taps microphone]… why is this being recorded …How deeply does she want us to go into this ??
G		She is going to make notes, recording it and writing down what we say…
J		Why ?
G		She thinks we might change what we say when she interviewed us..
All		[Laughs]
M		Yeh totally, I did that interview, [refers to 1:1 interview] did you have one… did you ?? I told her what it was really like – no point messing it up – I told her what it was really like?
J	10.33	Yeh, It could be also ….you are with your friends then maybe it goes better, if you are with your friends then may be it goes better.. if you don't **know… or like…** them and you are put in a situation with...
S		Yeh right those who don't do Psychology
J		Yeh
M		You have to feel like comfortable and confident because if you don't and nobody makes any contribution….with them, you don't want to be awkward yeh that one…
S		Otherwise you have to end up doing it on your own.. or wanting to be on your own…
G	11.14	Explain what the value to your understanding of a good study session is to your understanding of psychology ?
M	11.25	In a group, it is more valuable because it is like reading from 5 different books instead of one that.. its like getting everyones point of view, its easier as you have more information
S		Yeh, like having it rephrased….It may then make it more understandable coz you have heard it 3 or 4 times and so like you haven't just heard just one person and the way they have said it….it might make it more understandable, the way they have said it
All		[whispering] [eating sweets and tiredness and Starbursts)
M		What's the next question?
M		If you come out feeling like, yes I can do this
G		When you come out having actually learnt something
M		And they haven't confused you
M		You come out feeling you want to go again .. coz if you don't want to go again…
S	13.25	Like when you did the evaluation things at the end, the words you coloured in, it made you feel like, how bad or how well it actually went …
M		Which ones you coloured in … oh yeh
G		Oh yeh
S	13.48	The word I coloured in most was "distracted"
J		Talking of distracted….What room are we in ?
G		.. what now….The new room that has been made – it is like a study room
S		Its quite …
G		Its quite what?

S		Quite **cool**
All		… [fiddling , stretching, yawning]
G	14.31	Whats the next question…Did the study session have a negative impact on your understanding
M		If you are confused
S		Like if you came out and you felt like it was a bit of a waste…and you wanted to go home half way through and you felt you were wasting your time, like I wanted to go home and do it myself
M	14.55	Oh yes, like you were wasting your time
		Say like if she said something, I cant remember her name…. … she would say something like … No
M		Is she called (name) ?
S		No… (name)
M		That was it …
G		Who was that ?
S		She is like one year above.. she was, well quite helpful, She was quite like shy
M		Yes she was really shy
S		So we managed to … end up talking **at** her…
M		She like did her own work in the session
G		Sounds [helpful !]
S	15.37	To be fair, in the sessions where we did do something, like either Will or Laura took charge and we ended up doing like cheatie cards or something like that for twenty minutes..
J	15.52	In ours we basically did like homework
G		Did you do your after school ?
J		No
S		I think it would have been better if we did homework or something together, but instead it was basically like make cheatie cards coz they don't always work… I don't always like them…
G		No I don't like them..
M		I don't **mind** them…but I didn't use them to revise…
S		I am like one of those people who have to write it down loads of times before it goes in…
G		Same… I have to write to down loads of times
G / M	16.37	What would you recommend to students starting AS level in September ?
J		Would you recommend a study session or not ?
S		I wouldn't recommend a group , unless you **know** that you work well with other people
M		If you know you are really going to get on with others
S		Yes….Obviously coz we didn't know each other at the start of the year and then we ended up just
G	17.11	Yes so you didn't know you were going to be friends with those people in the group, so it is hard to make a group straight away..
S		I mean it did help towards developing friendships and things like that and getting in a group, but when it came to like actually doing the work and stuff it actually **didn't help at all..** it would have been easier if it was a smaller group **(Group size was 4)**

363

M		I would have suggested it to be organized… coz everyone always says oh yes I am going to be well organized but nobody really is … And like if they have psychology homework they just do it they don't put it off
S	18.09	Self-concept is about how positive or negative you feel about psychology – how do you think it could be accurately measured ? Likert scale ?
M		That sounds like an exam question!
S		It does doesn't it !... Ummm
M		Yeh like that thing, that thing, that Likert scale questionnaire
S		Questionnaire at the start of the year…
		How good do you think you are at Psychology and how good do you think you are at Maths ?
G		Oh you mean that thing that we filled in ?
J		Oh yes… I remember that
G		No that was a different one …{ J makes a circle ?}
m		No not the wheel , that was like the study buddy thing….
S		It was like a questionnaire how good are you or how scared are you about Psychology and maths.. I think it was a scale of 1 – 5.. did you have to add it up at the end ???
J		So is that academic self-concept?
M	19.14	Even if you are a genius at Maths you might not think you are ! so you put yourself as "no " I'm not good at maths
J		Oh right, yeh
S		But that is like your own concept of how good you are
M		But then also.. does it not also depend on any other extraneous variables, if you are having a bad day and you might write oh yes I am crap at everything..
G		Is that reliable doing it like that?
M		No coz like
S		You get people who are really big headed and aren't good at certain subjects and put like ….
M		Laughs…
S		Like with Will… he says oh No I've got psychology I am going to be hanging, and I am going to get so drunk, and he sent us pictures of him and alcohol and I don't really want to know… that is just a bit .. what are you doing? I
M		Is he coming today ?
S		He didn't say whether he was or he wasn't ?
All	21.13	Discuss [talking about (name) and weights]
G andM		We haven't really been going in depth have we.. No .. Ahhhh
		[Shoes, 18th Birthday parties,
S		I wouldn't recommend a group but only a small group
J		What about a smaller group, what about 3 in a group
		We had (name and name and name) and M and Me and will is quite elaborate and came just for the social side…
G		I would say do all 3 types of learning
M		Yes , good idea
S		Yes, because when we did that questionnaire thingie and it was like what do you like and what kind of learner are you… and then she said

		you do really well with …. But inside I felt like I hate working with other people so I don't know why it said that…
G		I worked for me and it said I like to work by myself so I did
M		How about try email and then choose ? That would be a good idea
S	23.32	So do you think yours worked ?
J		What did you do just sit on your own ???
G		Huh, huh
J		Where
G		In the library.. and if I got stuck I would ask somebody, like what the answer is…
M		Did it help, like when you went in to the resit ? Did you revise up there ? [pointing to the library seating]
G		Yeh
M		Did you feel confident when you went into the resit ?
G		Yeh.. at least I was confident when I went in (may be not when I came out)
M		So like you felt confident in your own knowledge
G		Yes, I felt more confident because if you revise with other people then you are not doing what you need to do
M		Yes but I think if you do revise with other people and if you don't 100% get it you may end up brushing over it and you say like Oh that will be right..
G		Coz if you are on your own you are more likely to go in depth into it
S		Its like informational social influence - you don't want to look stupid …
M		Yes it is , you don't want to look stupid in front of your friends..
G		But then when you work on your own you put things off because you don't revise it
J	0025	Yes, I just don't have the will power to do it by myself, I need someone to push me and say ….yes… to push me to do other things
M		It is good in that sense then
S		I didn't find ours useful toward the ends coz I just sat there…
M		I think it totally depends on the person
S		I don't think the questionnaire that we did at the start of the year was very reliable at all… it told me something that I know I'm not
M		I think like you said I think there should be a chance to try every style like you [name] said before and then chose from them because you are not going to know until you try are you…? So like everyone knows what to do coz they revised for their GCSE's
S		Yes, I have to revise on my own, like I just **have** to.. I have revised every subject on my own and it is so much easier to revise on my own….Would you not have found it easier to revise on your own ?
		Pause
J		I cant revise, erm, probably not I find when I am with other people doing it I find I get more out of it
S		Yes
J		But like when you said earlier when I get a bit stuck [pointing to G ?] I tend to go …… "plop"……. I don't look deeply into it I will go back over it and then that's it really
	0027	

<u>Themes identified</u>

Mixed experiences and successes of PGL groups
Personality of Guide mattered – perhaps MORE directive ?
Individual differences in appreciating it's effectiveness – some people need more help than others
Beneficial for making friends, which is essential in transition times
Good informal learning
Group were unsure whether learning styles / compatibility / and did this matter

<u>Worked well when:</u>

All were focused
Structured time and place and organised
When had <u>a specific </u>task to complete
Friends who you could work with

<u>Recommendations</u>

Offer a taster of each session to all first – let them try all three and see which suits
Spend time selecting groups of friends (in week one)
Offer a good room

Figure 76 Group interview transcript

Overarching themes:
- ☺ POSITIVE OF COLLABORATION
- ☺ NEGATIVE OF COLLABORATION better alone
- ☺ Personality of Guide mattered –
- ☺ Beneficial for making friends which is essential in transition times
- ☺ Good informal learning

S	6.08	What shall we do now What exactly happens in a study session that makes it useful?
G		What exactly happens in a study session that makes it useful?
J		For Revision.. yeh ?
M	6.45	What happens in each context? Go on G what do you do ?
G		What happens in each context? Well I sit by myself and revise and if I need to ask someone I ask (name, but she is not really helpful really
S and M		Laugh
G		Why what do **you** do ?
M		Well, what did we do…I don't think it worked that well…we got distracted a bit too much we do…
S		I'm not sure whether it really helped that much, coz by the time we got distracted…
J	7.09	Did you do a group one ?
M		Yes, with (name) and (name), but when it was good…
S		Sometimes it was good, Sometimes it did work when we did work it was good then it was alright
G		Did you not get too distracted ? , I'm not sure I could concentrate…
S		No…Yeh, coz I thought …didn't we originally have a couple of us and the 3 of us and we just end up saying right yeh.. shut up.. like (name) and (name) wanted to a group on their own, but then he came once and he told him not to come because we were already like a good group
M		Yeh, like me and (name) and then (name)l and (name) came .. did (name) stay with us ?
S		He came once and told we like told (name) off the whole time
S		Who did you do your peer one with ?
J	8.10	Us, well (name), um (name) and eh I think that was it. Actually …. a few people dropped out, (name) dropped out and (name) dropped out..
M	8.50	What exactly makes the study session useful ?
J		Useful hmm, right ?
G		If you actually revised,
S	8.59	Right, If you have a set hour, or like I cant really be bothered to do it this week,
M		Structured…. The place you do it in….. .coz we did it in that room didn't we, that was better

J		Yeh
G		What makes the study session **un**successful ?
S		If there is too many people in the group
G		Yeh, if there are…..you cant concentrate and you don't learn anything
M		Get distracted.. all the time… Hmmm [laughs]
J	9.10	Yeh , sounds good.. [taps microphone]… why is this being recorded …How deeply does she want us to go into this ??
G		She is going to make notes, recording it and writing down what we say…
J		Why ?
G		She thinks we might change what we say when she interviewed us..
All		[Laughs]
M		Yeh totally, I did that interview, [refers to 1:1 interview] did you have one… did you ?? I told her what it was really like – no point messing it up – I told her what it was really like?
J	10.33	Yeh, It could be also ….you are with your friends then maybe it goes better, if you don't know… or like… them and you are put in a situation with...
S		Yeh right those who don't do Psychology
J		Yeh
M		You have to feel like comfortable and confident because if you don't and nobody makes any contribution….with them, you don't want to be awkward yeh that one…
S		Otherwise you have to end up doing it on your own.. or wanting to be on your own…
G	11.14	Explain what the value to your understanding of a good study session is to your understanding of psychology ?
M	11.25	In a group, it is more valuable because it is like reading from 5 different books instead of one that.. its like getting everyones point of view, its easier as you have more information
S		Yeh, like having it rephrased….It may then make it more understandable coz you have heard it 3 or 4 times and so like you haven't just heard just one person and the way they have said it….it might make it more understandable, the way they have said it
All		[whispering] [eating sweets and tiredness and Starbursts)
M		Whats the next question
M		If you come out feeling like, yes…. I can do this
G		When you come out having actually learnt something
M		And they haven't confused you
M		You come out feeling you want to go again .. coz if you don't want to go again…
S	13.25	Like when you did the evaluation things at the end, the words you coloured in, it made you feel like, how bad or how well it actually went …
M		Which ones you coloured in … oh yeh
G		Oh yeh
S	13.	The word I coloured in most was "distracted"

	48	
J		Talking of distracted….What room are we in ?
G		.. what now….The new room that has been made – it is like a study room
S		Its quite …
G		Its quite what?
S		Quite **cool**
All		… [fiddling , stretching, yawning]
G	14.31	Whats the next question…Did the study session have a negative impact on your understanding
M		If you are confused
S		Like if you came out and you felt like it was a bit of a waste…and you wanted to go home half way through and you felt you were wasting your time, like I wanted to go home and do it all again by myself
M	14.55	Oh yes, like you were wasting your time
		Say like if she said something, I cant remember her name…. … she would say something like … No
M		Is she called (name) ?
S		No… (name
M		That was it …
G		Who was that ?
S		She is like one year above.. she was, well quite helpful, She was quite like shy
M		Yes she was really shy
S		So we managed to … end up talking at her…
M		She like did her own work in the session
G		Sounds [helpful !]
S	15.37	To be fair, in the sessions where we did do something, like either Will or Laura took charge and we ended up doing like cheatie cards or something like that for twenty minutes..
J	15.52	In ours we basically did like homework and if we got stuck she liked helped us out a bit and got us all to work harder and that…. It was alright, at least we did stuff
G		Did you do your after school ?
J		No
S		I think it would have been better if we did homework or something together, but instead it was basically like make cheatie cards coz they don't always work… I don't always like them…
G		No I don't like them..
M		I don't **mind** them…but I didn't use them to revise…
S		I am like one of those people who have to write it down loads of times before it goes in…
G		Same… I have to write to down loads of times
G / M	16.37	What would you recommend to students starting AS level in September ?
J		Would you recommend a study session or not ?
S		I wouldn't recommend a group , unless you **know** that you work

		well with other people
M		• If you know you are really going to get on with others
S		• Yes….Obviously coz we didn't know each other at the start of the year and then we ended up just
G	17.11	• Yes so you didn't know you were going to be friends with those people in the group, so it is hard to make a group straight away..
S		• I mean it did help towards developing friendships and things like that and getting in a group, but when it came to like actually doing the work and stuff it actually didn't help at all.. it would have been easier if it was a smaller group (Group size was 4)
M		I would have suggested it to be organized… coz everyone always says oh yes I am going to be well organized but nobody really is … And like if they have psychology homework they just do it they don't put it off
S	18.09	Self-concept is about how positive or negative you feel about psychology – how do you think it could be accurately measured ? Likert scale ?
M		That sounds like an exam question!
St		It does doesn't it !... Ummm
M		Yeh like that thing, that thing, that Likert scale questionnaire
S		Questionnaire at the start of the year…
		How good do you think you are at Psychology and how good do you think you are at Maths ?
G		Oh you mean that thing that we filled in ?
J		Oh yes… I remember that
G		No that was a different one …{ J makes a circle ?}
M		No not the wheel , that was like the study buddy thing….
S		It was like a questionnaire how good are you or how scared are you about Psychology and maths.. I think it was a scale of 1 – 5.. did you have to add it up at the end ???
J		So is that academic self-concept?
M	19.14	Even if you are a genius at Maths you might not think you are ! so you put yourself as "no " I'm not good at maths
J		Oh right, yeh
S		But that is like your own concept of how good you are
M		But then also.. does it not also depend on any other extraneous variables, if you are having a bad day and you might write oh yes I am crap at everything..
G		Is that reliable doing it like that?
M		No coz like
S		You get people who are really big headed and aren't good at certain subjects and put like ….
M		Laughs…
S		Like with Will… he says oh No I've got psychology I am going to be hanging, and I am going to get so drunk, and he sent us pictures of him and alcohol and I don't really want to know… that is just a bit .. what are you doing? I
M		Is he coming today ?
S		He didn't say whether he was or he wasn't ?

All	21.13	Discuss [talking about name and weights]
G and M		We haven't really been going in depth have we.. No .. Ahhhh
		[Shoes, 18th Birthday parties,
S		I wouldn't recommed a group but only a small group
J		What about a smaller group, what about 3 in a group
		We had (name) and (name) and (name) and (name) and Me and (name) is quite elaborate and came just for the social side…
G		I would say do all 3 types of learning
M		Yes , good idea
St		Yes, because when we did that questionnaire thingies and it was like what do you like and what kind of learner are you… and then she said you do really well with …. But inside I felt like I hate working with other people so I don't know why it said that…
G		It worked for me and it said I like to work by myself so I did
M		How about try email and then choose ? That would be a good idea
S	23.32	So do you think yours worked ?
J		What did you do just sit on your own ???
G		Huh, huh {affirmative}
J		Where
G		In the library.. and if I got stuck I would ask somebody, like what the answer is…
M		Did it help, like when you went in to the resit ? Did you revise up there ? [pointing to the library seating]
G		Yeh
M		Did you feel confident when you went into the resit ?
G		Yeh.. at least I was confident when I went in (may be not when I came out)
M		So like you felt confident in your own knowledge
G		Yes, I felt more confident because if you revise with other people then you are not doing what YOU need to do
M		Yes but I think if you do revise with other people and if you don't 100% get it you may end up brushing over it and you say like Oh that will be right..
G		Coz if you are on your own you are more likely to go in depth into it
S		Its like informational social influence - you don't want to look stupid …
M		Yes it is , you don't want to look stupid in front of your friends..
G		But then when you work on your own you put things off because you don't revise it
J	0025	Yes, I just don't have the will power to do it by myself, I need someone to push me and say ….yes… to push me to do other things
M		It is good in that sense then
S		I didn't find ours useful toward the ends coz I just sat there…
M		I think it totally depends on the person
S		I don't think the questionnaire that we did at the start of the year

		was very reliable at all… it told me something that I know I'm not
M		I think like you said I think there should be a chance to try every style like you [SG] said before and then chose from them because you are not going to know until you try are you…? So like everyone knows what to do coz they revised for their GCSE's
S		Yes, I have to revise on my own, like I just have to.. I have revised every subject on my own and it is so much easier to revise on my own….Would you not have found it easier to revise on your own ?
		Pause
J		I cant revise, erm, probably not I find when I am with other people doing it I find I get more out of it , it like I need them to give me a bit… of like a push or something like that
S		Yes
J		But like when you said earlier when I get a bit stuck [pointing to SG ?] I tend to go …… "plop"……. I don't look deeply into it I will go back over it and then that's it really
	00 27	

Themes Identified
- POSITIVE OF COLLABORATION
- NEGATIVE OF COLLABORATION better alone
- Personality of Guide mattered –
- Beneficial for making friends which is essential in transition times
- Good informal learning

Worked well when:
- All were focused
- Structured time and place and organised
- When had a specific task to complete
- Friends who you could work with

Recommendations
- Offer a taster of each session to all first – let them try all three and see which suits
- Spend **time** selecting groups of friends (in week one)
- Offer a good room
- Meet the guide and see if personality fits i.e. more directive
- Individual differences in appreciating it's effectiveness – some people need more help than others

Figure 77 Thematic assessment of group interview

Figure 78 Hierachical Cluster analysis 1

Word card responses

	Ellie		Ashleigh		Lucy		georgia		Matthew		Sarah		Megan		James		Olivia	
	01.03.2013				28.02.2013		14.02.2013				01.03.2013		14.02.2013		28.02.2013		13.02.2013	
Question 1 Describe how the study session has affected your K and U of Psychology	improvement	4	happier	4	confident	4	confidence	4	super	4	beneficial	4	rewarding	4	reinforced	4	confident	4
	happier	4	much better	4	deeper	5	dependent	2	better	4	short amount	2	always increasing	4	helped memory	4	motivated	4
	higher level of understanding	5	get it more	4	memorable	4	average	2	confident	4	enough	4	still room for improvement	4	effective	4	positive	4
	feel ready	4	helpful	4	vivid	4	good	4	like to make sure I know it	4	not deep knowledge	2	confident	4	needed	4	supported	4
	like I wont forget the important parts	4	canny	4	picturable	3	better	4	confident in the fact I can get it if try	4	ok	2	positive	3	grateful	5	needed	4
Question 2 How do you feel about your study sessions	at times useful	3	Okay	3	procrastinating	2	hard	2	at my own pace	2	productive	4	positive	4	positive	4	supportive	4
	helpful	3	not bad	3	glad	3	great	4	fine	4	calm	3	less reading - which is great for me	4	helpful	4	fun	4
	achievement	4	get it better	4	fun	4	sometimes useless	3	no stress	3	relaxed	4	helps gain confidence	4	encouraging	4	happy	4
	helps understand different ways of learning	4	useful most of the time	3	positive	4	helpful	4	useful	4	happy	4	productive	4	effective	4	fruitful	4
	effective	5	worthwhile	4	effective	5	glad	3	time well spent	4	what I need	4	deepens knowledge	5	rewarding	5	beneficial	4
TOTAL	40		37		38		32		37		33		40		42			
Total for Q1	21		20		20		16		20		14		19		21		21	
Total for Q2	19		17		18		16		17		19		21		21		21	
Grand Total DL / AL / PGL for Q1	61								50						60			
Grand Total DL / AL / PGL for Q2	54								52						62			

Themes:

Happy
Positive
Support

Grading

5 very positive
4 reasonably positive
3 neutral
2 neagative
1 very negative

Figure 79 Word card response from Interview

Overarching themes pictorially represented

Figure 80 Themes emerging from the study portrayed pictorially

References

Alasuutari, P. (1998). *An Invitation to Social Research.* London: Sage.

Allwood, J., Traum, D., and Jokinen, K. (2000). Cooperation, Dialogue and Ethics. *International Journal of Human Computer Studies, 53*, 871-914.

Andriessen, J., Baker, M. and van der Puil, C. (2011). Socio-cognitive tension in collaborative working relations. In S. Ludvigsen, Lund, A., Rasmussen, I. and Saljo, R (Ed.), *Learning Across Sites: New Tools, Infrastructures and Practices.* Abingdon: Routledge.

Andrews, T. (2012). What is Social Constructivism? *Grounded Theory Review- An International Journal, 11*(1).

Andriessen, J., Pardijs, M. and Baker, M. (2013). Getting On and Getting Along- Tension in the development of collaborations. In M. Baker, Andriessen, J, Järvelä, S (Ed.), *Affective Learning Together - Social and emotional dimensions of collaborative learning.* Abingdon, Oxon: Routledge.

AQA. (2014). Enquiries about Results. In AQA (Ed.), *AQA website* (p. 2). Manchester: OFQUaL.

AQA. (2014). Retrieved 03 August 2014, from http://www.aqa.org.uk/exams-administration/about-results/uniform-mark-scale.

Archer, W. and Davison, J. (2008). *Graduate Employability- What do employers think and want?* London: The Council for Industry and Higher Education.

Arden, M. (2015, July). *Ethics and Integrity.* Paper presented at the PSP PhD Research Conference - A conference for Research students in Psychology, Sociology and Politics. For PhD students by PhD students. Sheffield Hallam University.

Arnett, J.J. (2006). G.Stanley Hall's Adolescence: Brilliaanace an Nonsense. *History of Psychology, 9*(3), 186-197.

Arksey, H. and. Knight, P. (1999). *Interviewing for Social Scientists.* London; New Dehli: Thousand Oaks; Sage Publications.

Arthur, J., Waring, M., Coe, R.J. and Hedges, L.V (Ed.). (2012). *Introduction to Research Methodologies in Education.* London: Sage.

ATP (2014). Darlington CPD. Retrieved March, 2014, from https://theatp.org/cpd-at-teeside-university-2220.html.

Ball, S., McRae, S. and Maguire, M. (2013). *Choice, Pathways and Transitions Post-16: New Youth, New Economies in the Global City.* Abingdon, Oxon: Routledge.

Bakhshi, S., Harrington, K. and O'Neill, P. (2008). Psychology students' experiences of peer mentoring at the London Metropolitan University Writing Centre. *Psychology Teaching Review, 14*(2), 64-66.

Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ Prentice Hall.

Banks, J and Smyth, E. (2015). 'Your whole life depends on it': academic stress and high-stakes testing in Ireland. *Journal of Youth Studies, 18*(5), 598-616.

Bartsch, R.A., Case, K.A. and Meerman, H. (2012). Increasing Academic Self-Efficacy in Statistics With a Live Vicarious Experience Presentation. *Teaching of Psychology, 39*, 133- 136.

Barnes, M. (2000). Effects of dominant and subordinate masculinities on interactions in a collaborative learning classroom. In J. Boaler (Ed.), *Multiple Perspectives on Mathematics Teaching and Learning*. London: Ablex.

Barron, B. (2000). 'Achieving coordination in collaborative problem-solving groups'. *The Journal of Learning Sciences, 9*, 403-436.

Barron, B. (2003). When smart groups fail. *Journal of the Learning Sciences, 12*(3), 307-359.

Barrow, R. (2005). The Case Against Empirical Research in Education. In R. Barrow, Foreman-Peck, L (Ed.), *What use is Educational Research - A debate*. Philosophy of Education Society of Great Britain: Impact.

Basden, B.H., Basden, D.R. and Henry, S. (2000). Costs and benefits of collaborative remembering. *Applied Cognitive Psychology, 14*, 497-507.

Bateson, G., Jackson, D.D., Haley, J. and Weakland, J. (1956). Towards a Theory of Schizophrenia. *Behavioral Science, 1*, 251-264.

Bates, I. (1998). Resisting 'empowerment' and realizing power: an exploration of aspects of the GNVQ. *Journal of Education and Work, 11*(2), 187-203.

Baumgartner, L. M. (2001). An update on transformational learning. *New Directions for Adult and Continuing Education and Science, 89*, 15-22.

Bayer, L.E. and Apple, M.W. (1988). *The Curriculum: Problems, Politics and Possibilities*: SUNY series, frontiers in education.

Bell, J. (2000). *Methods of aggregating GCSE results to predict A-level performance.* Paper presented at the British Educational Resarch Association Annual Conference, Cardiff University.
http://www.leeds.ac.uk/educol/documents/00001506.htm.

Bembenutty, H. (2011). New Directions for Self-Regulation of Learning in Postsecondary Education *NEW DIRECTIONS FOR TEACHING AND LEARNING* (Vol. 126, pp. 117-124). online in Wiley Online Library (wileyonlinelibrary.com) Wiley Periodicals.

Bennett, N. (1976). *Teacher styles and pupil progress.* London: Open Books.

Bennett, S. (2003). *Libraries designed for Learning.* Washington DC.

Bennett, T. (2012). School councils: Shut up, we're listening, *The Guardian.* Retrieved from http://www.theguardian.com/education/2012/mar/12/school-councils-number-lip-service.

Berk, R. (2001). The active ingredients in humor: psycho physiological benefits and risks for older adults. *Educational Gerontology, 27*, 323-339.

Birch, D. (2012). *Championing independent learning with post-16 students.* Retrieved 16th Feb, 2016, from http://www.nationaleducationtrust.net/ShapingIdeasShapingLives154.php

Black, F.M. and MacKenzie, J. (2008). Quality enhancement themes: the first year experience- peer support in the first year *The Quality Assurance Agency for Higher Education.*

Blackwell, L.S., Trzesniewski, K.H and Dweck, C. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development, 78*(1), 246-263.

Blaire, T. and Woolhouse, M. (2000). *Learning styles and retention and achievement on a two-year A-level programme in a further education college.* Paper presented at the Further Education Research Network Conference

Blos, P. (1962). *On Adolescence - A Psychoanalitic Interpretation*: Free Press.

Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method.* Berkeley: University of California Press.

Boaler, J. (2000). *Multiple Perspectives on Mathematics Teaching and Learning*: Greenwood Publishing Group.

Bogain, A. (2012). Erasmus Language students in a British University – a case study. *The Language Learning Journal,, 40*(3), 359-374.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., Hawkey, K., Ingram, M., Atkinson, A. and Smith, M. (2005). *Creating and sustaining effective professional learning commu*nities. Research Report 637. London: DfES and University of Bristol

Bone, C. (2012). *The role of academic self-concept at Post-16.* Presented at the Raising Attainment in Education: The Role of Psychology, The British Psychological Society, Milton Keynes. http://www.bps.org.uk/what-we-do/bps/governance/annual-report-and-review/annual-review-2012/psychology-education-section-2012/psychology-education-section-2012.

Bone, C. (2013). I dont really know how to study - Are there benefits to peer-guided learning in sixth-form study periods? *ATP Today - The Magazine for the Association for the Teaching of Psychology, June*, 10-11.

Bone, C. (2015)The role of academic self-concept at Post-16. Presented at The role of competence beliefs in teaching and learning. The British Psychological Society Education Section, Annual Conference ,Liverpool, https://www.bps.org.uk/events/role-competence-beliefs-teaching-and-learning

Bonwell, C., Eison, J. (1991)*.* Active Learning: Creating Excitement in the Classroom *Information Analyses -* ERIC Clearinghouse Products (071). p. 3*.*

Bonne, L., and Pritchard, R. (2007). Teachers developing as researchers. *Teaching Learning Research Initiative., Summary Wellington:*.

Boud, D., Cohen, R. and Sampson, J. (1999). Peer Learning and Assessment,. *Peer Learning and Assessment, Assessment & Evaluation in Higher Education, 24*(4), 413-426. doi: 10.1080/0260293990240405

Boud, D., Cohen, R. and Sampson, J. . (2001). *Peer learning in Higher Education- Learning from and with each other*: Kogan Page.

Bowles, T.V and Hattie, J. A.C. (2015). Getting By With a Little Help From My Friends: A Pilot Study of the Measurement and Stability of Positive Social Support From Significant Others for Adolescents. *Journal of Relationships Research, 6*.

Bragg, M. (Producer). (2012, Accessed 16th Jan 2012). Socrates (470-399 BC). In our time Archive: Philosophy Podcast Retrieved from http://www.bbc.co.uk/podcasts/series/iotp,

Branden, N. (1994). *The six pillars of self-esteem.* New York: Bantam Books.

Briggs, A.R.J., Clarke, J. and Hall, I. (2012). Building bridges: Understanding student transition to university. *Quality in Higher Education, i* (First article), 1-19.

Broad, J. (2006). Interpretations of independent learning in further education. *Journal of Further and Higher Education, 30*(2), 119-143.

Brock, S. E. (2005). Time on-task. In S. W. Lee (Ed.), Encyclopedia of school psychology (pp. 567–568). Thousand Oaks, CA: Sage.

Brogan, C. (1998). *The interaction between self-esteem and academic achievement: A review of selected studies.* (EdD https://books.google.co.uk/books?id=ykfDRw_X64kC&printsec=frontcover&source =gbs_ge_summary_r&cad=0#v=onepage&q&f=false), Liberty University.

Brooks, J.G. and Brooks, M.G. (1993). The Case for Constructivist Classrooms Alexandria, VA.: Association for Supervision and Curriculum Development.

Brookfield, S. (1995). *Becoming a Critically Reflective Teacher*. San-Francisco: Jossey-Bass.

Brown, H.D. (2001). *Teaching By Principles: An Interactive Approach to Language Pedagogy*. White Plains, NY: Addison Wesley Longman.

Bruffee, K.A. (1984). Collaborative Learning and 'conversation of mankind'. *College English, 46*, 635-652.

Bruffee, K.A. (1993). Collaborative learning: Higher education, interdependence and the authority of knowledge. Baltimore: The Johns Hopkins University Press.

Bruffee, K. (1995). Sharing our toys- Cooperative learning versus collaborative learning. *Change* (Jan/Feb,), 12-18.

Bruner, J. (1971). *The relevance of Education*. New York: Norton.

Bryman, A. (1988). *Quantity and quality in social research*. London, Boston: Unwin Hyman Publications.

Bryman, A. (2001). *Social Research Methods*. Oxford: Oxford University Press.

Bryman, A. (2006). Integrating Quantitative and Qualitative Research: How is it Done? *Qualitative Research, 6*, 97-113.

Bryman, A. (2007). Barriers to Integrating Quantitative and Qualitative Research. *Journal of Mixed Methods Research, 1*, 8-22.

Bryman, A. (2008). *Social Research Methods*. Oxford: Oxford University Press.

Bryman, A. and Cramer, D. (2001). *Quantitative Data Analysis with SPSS release 10 for Windows - A guide for Social Scientists*. East Sussuex: Routledge.

Budge, S. (2006). Mentoring in post secondary eduaction. *Journal of College Reading and Learning, 37*(1), 73-87.

Burgess, R.G. (1981). Keeping a research diary. *Cambridge Journal of Education, 11*(1), 75-83.

Burns, R (1982). *Self concept development and education*: Holt, Reinhard and Winston Education.

Burns, C. and Martin, F. (2011). International students' perceptions of their global skills development: a collaborative approach. *EMERGE, 3*, 25-42.

Burr, V. (2003). *Social constructivism*. Hove, East Sussex: Routledge. Taylor Francis Group.

Burr, V. (2015). *Social Constructivism*. Hove, East Sussex: Routledge. Taylor Francis Group

Butkowsky. I.S. and Willows, D. (1980). Cognitive-motivational characteristics of children varying in reading ability:evidence for learned helplessness in poor readers. *Journal of Educational Psychology, 72*, 408-422.

Byrne, B. (1996). Academic self-concept: Its structure, measurement and relation to academic achievement. In Bracken (Ed.), *Handbook of self-concept: Developmental, social and clinical considerations* (pp. 287-316). New York.

Bywater, J., and Brown, A. (2010). Shorter Personality Questionnaires—A User's Guide Part 1. *Assessment and Development Matters, 2*(2), 15.

Campbell, D. (2000). *The Socially Constructed Organization*. London and New York: Karnac Books.

Cambell, A., Freedman, E., Boulter, C. and Kirkwood, M. (2003). *Issues and Principles in Educational Research for Teachers*. Southwell Nottingham.

Carlsmith, K. and Cooper, J. (2002). A Persuasive Example of Collaborative Learning. *Teaching of Psychology, 29*, 132-135.

Carnell, E. and Lodge, C. (2002). *Supporting Effective Learning*. London: Sage.

CBI. (2009). *Future Fit: Preparing Graduates for the World of Work*. London.

CeAL. (2009). INSIGHT. *Centre for Active Learning*. Retrieved March 17, 2015, from http://insight.glos.ac.uk/tli/resources/toolkit/resources/alcs/Pages/default.aspx.

CEM. (2011). Curriculum, Evaluation and Management centre. Retrieved 3 November, 2011, from website:http://www.cemcentre.org/.

CEM. (2014). The Advanced Level Information System. Retrieved 4th August, 2014, from http://www.cem.org/alis/introduction.

C.E.R.P. (2012). Centre for Education Research and Practice. Retrieved May, 2014, from https://cerp.aqa.org.uk/.

Chapman, C., Lowden, K., Chestnutt, H., Hall, S., McKinney, S., Hulme, M. and Watters, N. (2014). The School Improvement Partnership Programme: Using Collaboration and Enquiry to Tackle Educational Inequity *School Improvement Partnership Programme (SIPP)* (pp. 1-57). Glasgow: University Of Glasgow.

Chiu, M.M., Klassen, R.M. (2009). Calibration of reading self-concept and reading achievement among 15-year-olds: Cultural differences in 34 countries. *Learning and Individual Differences, 19*(3), 372-386.

Chen, B. H., Chiu, W-C., Wang, C-C. (2015). The Relationship Among Academic Self-concept, Learning Strategies, and Academic Achievement: A Case Study of National Vocational College Students in Taiwan via SEM. *The Asia-Pacific Education Researcher, 24*(2), 419 - 431.

Christiansen, A. and Bell, A. (2010). Peer learning partnerships: exploring the experience of pre-registration nursing students. *Journal of Clinical Nursing, 19*, 803-810.

Coetzee, L.R. (2011). *THE RELATIONSHIP BETWEEN STUDENTS' ACADEMIC SELF-CONCEPT, MOTIVATION AND ACADEMIC ACHIEVEMENT AT THE UNIVERSITY OF THE FREE STATE*. Educational Studies. University of South Africa.

Coffield, F. (2000). Lifelong learning as a lever on structural change? Evaluation of white paper: Learning to succeed: a new framework for post-16 learning. *Journal of Education Policy, 15*(2), 237-246.

Coffield, F. (2007). "Running Ever Faster Down the Wrong Road: An Alternative Future for Education and Skills". In Institute of Education (Ed.). London: http://www.s7colleges.com/learning-innovation/_pdf/FrankCoffieldInauguralLectureDec06%20_3_.pdf.

Cohen, D and Crabtree, B. (2006) Qualitaitive research Guidelines Project. July 2006 http://www.qualres.org/index.html

Cohen, L., Manion, L. and Morrison, K. (2011). *Research methods in Education* (7th ed.). Milton Park Oxon: Routledge.

Cokley, K. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American College students. *Journal of Black Psychology, 26*(2), 148-164.

Connell, J.P. and Welborn, J.G., (Ed.). (1991). *Competence, autonomy and relatedness: A motivational analysis of self-system processes* (Vol. 23). Hillsdale: NH: Erlbaum.

Cook, A. and Leckey, J. (1999). Do Expectations Meet Reality? A survey of changes in first-year student opinion. *Journal of Further and Higher Education, 23*(2), 157-171.

Cooley, C.H. (1912). *Human Nature and the Social Order.* New York: Schreibners.

Costley, C., Elliot, G., and Gibbs, P. (2010). *Doing work based research.* London: SAGE.

Cousins, J.B. and Earl, L.M. (Ed.). (1995). *Participatory Evaluation in Education: Studies in Educational Evaluation and Policy Analysis.* London: Falmer.

Crabtree, H., Leeth, N. and Valentine, C (2006). *Supporting and Facilitating the Transition from Further Education to Higher Education.* Paper presented at the Proceedings: Education in a Changing Environment: 3rd Learning and Teaching Research Conference, University of Salford.

Crace, J. (2007). Jerome Bruner: The lesson of the story. *The Guardian.* Retrieved from http://www.theguardian.com/education/2007/mar/27/academicexperts.highereducationprofile

Crawford, K. (1996). Vygotskian approaches to human development in the information era. *Educational Studies in Mathematics, 31*.

Crede, M. and Kuncel, N.R. (2008). Study Habits, Skills and Attitudes. The Third Pillar Supporting Collegiate Academic Performance. *Perspectives on Psychological Science, 3*(6), 425-453.

Cresswell, J.W. (2009). *Research Design – Qualitative, Quantitative and Mixed Methods Approaches*: Sage publications.

Cresswell, J.W. and Plano Clark, V.L. (2011). *Designing and Conducting Mixed methods Research.* (Second Edition. ed.). London: SAGE publications.

Cromby, J. and Nightingale, D. (1999). What's wrong with social constructivism? In D. J. Nightingale and. J.Cromby (Ed.), *Social Constructionist Psychology: a critical analysis of theory and practice.* Buckingham: Open University Press.

Crook, C. (2013). Varieties of 'Togetherness' in Learning- and their mediation. In M. Baker, Andriessen, J., Järvelä, S. (Ed.), *Affective Learning Together - Social and emotional dimensions of collaborative learning.* Abingdon, Oxon: Routledge.

Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life.* New York: Harper Perennial.

Daniels, H. (2011). *Vygotsky and pedagogy.* London: Routledge.

DCFS. (2010). *The National Strategies Report on sixth-form performance management.* London.

De Fraine, B., Van Damme, J. and Onghena, P. (2007). A longitudinal analysis of gender differences in academic self-concept and language achievement: A multivariate multilevel latent growth approach. *Contemporary Educational Psychology, 32* (1), 132–150.

De Vaus, D. (2002). *Analyzing Social Science Data.* London: Sage.

Dearing, R. (1996). *Review of Qualifications for 16–19 Year Olds.* London.

Deci, E.L. and Ryan, R.M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist, 55*(1), 68–78. doi: 10.1037/0003-066X.

DeCiccio, A.C. (1988). *Social Constructionism and Collaborative Learning: Recommendations for Teaching Writing.* Paper presented at the Conference on College Composition and Communication, Merrimack College, St Loius. http://files.eric.ed.gov/fulltext/ED294201.pdf

Dembo, M.H. and Seli, H. (2013). *Motivation and learning Strategies for College Students - A focus on self-regulated learning* (Fourth ed.). New York and London: Routledge.

Denzin, N. (1970). *The Research Act in Sociology.* London: Butterworth.

Denzin, N.K. and Lincoln, Y.S. (Ed.) (1998). *The Landscape of Qualitative Research: Theories and Issues* (Vol.). Newbury Park, CA: Sage Publications.

Denzin, N.K. and Lincoln, Y.S. (2000). The Discipline and Practice of Qualitative Research. In N. Denzin., and Lincoln.,Y. S (Ed.), *Handbook of Qualitative Research (2nd edition).* Thousand Oaks CA: Sage.

Deuker, C. (2014). What expectations do sixth-form students have of their learning and their teachers and what expectations do teachers have of their students? Stage one of the action research. *Psychology Teaching Review, 20*(2), 64-78.

DfE. (2010). *The Importance of Teaching - The Schools White Paper.* London: The Stationery Office.

DfE. (2013). *A comparison of GCSE results and AS level results as a predictor of getting a 2:1 or above at university*. (DFE-00060-2013). London: Retrieved from https://www.gov.uk/government/publications.

DfE. (2014). *Mental health and behaviour in schools- Departmental advice for school staff*. (www.gov.uk/government/publications.). London.

DfE. (2015). *Mental health and behaviour in schools - Departmental advice for staff*. London: www.gov.uk Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416 786/Mental_Health_and_Behaviour_Information_and_Tools_for_Schools_240515 .pdf.

DfES. (2003). *Every Child Matters* London: The Stationery Office.

DfES. (2004). *The Leading Edge Partnership Programme Cohort 2 - Learning through sharing Practice*. London: Innovation.

DfES. (2007). *Annual Review of the Children and Young People's Plan*. [online].http://www.everychildmatters.gov.uk/IG00192/ [27 September, 2007].

DfES. (2011a). *Review of Vocational Education- The Wolf Report.* London.: The Stationery Office.

DfES. (2011). *16-19 Bursary Fund – Guide for 2011/12.* London: Young Peoples Learning Agency.

Deuker, C. (2014). What expectations do sixth-form students have of their learning and their teachers and what expectations do teachers have of their students? Stage one of the action research. *Psychology Teaching Review, 20*(2), 64-78.

Dimnet, E. (1927). *The Art of Thinking*. London.

Dörnyei, Z. and Csizér, K. (2012). How to Design and Analyze Surveys in Second Language Acquisition Research. In Z. Dörnyei (Ed.), *Research methods in applied linguistics*. New York: Oxford University Press.

Duckworth, A.L. (Writer) and TED (Director). (2009). True grit: Can perseverance be taught?, *TED Talks*. Retrieved from http://www.youtube.com/watch?v=qaeFnxSfSC4.

Duckworth, K., Akerman, R., MacGregor, A., Salter, E. and Vorahaus, J. (2009). Self-regulated Learning: A literature review *Centre for Research on the Wider Benefits of Learning Research*. London: Institute of Education, University of London.

Duke, J. (2012). Joining the dots: Piloting the work diary as a data collection tool. *Issues in Educational Research, 22*(2), 111-123.

Durkheim, E. (1952). *Suicide* (First published in 1897 ed.). London: Routledge and Paul.

Duncan, G. J., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A.C., Klebanov, P., Pagani, L.S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K. and Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6), 1428–1446.

Dweck, C.S (2000). *Self-theories: Their role in motivation, personality and development.* Philadelphia, PA.: Taylor and Francis.

Dweck, C.S., Walton, G.M. and Cohen, G.L. (2011). Academic Tenacity: Mindsets and skills that promote long term learning. *White paper prepared for the Gates Foundation*. Seatlle, WA.

Easterbrook, M. and Vignoles, V. (2014). When friendship formation goes down the toilet: Design features of shared accommodation influence interpersonal bonds and well-being. *British Journal of Social Psychology, FEB* doi:10.1111/bjso.12062.

Eisen, M.J. (2001). Peer based learning: A new Old Alternative to Professional Development. *Adult Learning, 12*(1), 9-10.

Elton, L. (2015). Active Learning; an interview with Lewis Elton. Retrieved March 15, 2015, from http://insight.glos.ac.uk/tli/resources/toolkit/wal/60seconds/Documents/Active%20Learning%20an%20interview%20with%20Lewis%20Elton.pdf.

Enfield, H (Writer). (1990). Harry Enfield and Chums. In H. T. productions (Producer). BBC Two: Endemol UK.

Entwistle, N.J. (1982). Study skills and independent learning. *Studies in Higher Education, 7*(1), 65-73. doi: 10.1080/03075078212331379321.

Entwistle, N and Ramsden, P. (1983). *Understanding Student Learning.* Milton Park, Abingdon: Routledge.

Entwistle, N.J. (1987). *Understanding classroom learning.* London Hodder and Stoughton

Entwistle, N., and Karagiannopoulou, E. (2013). Influences on personal understanding: Intentions, approaches to learning, perceptions of assessment, and a 'meeting of minds'. *Psychology Teaching Review, 19*(2), 80-96.

Erben, M. (1996). The purposes and processes of biographical method. In D. Scott, and Usher, R. (Ed.), *Understanding Educational Research*. London and New York Routledge.

Erikson, E.H. (1950). *Childhood and Society.* New York: Norton.

Erikson, E.H. (1968). *Identity: Youth and Crisis.* New York: Norton.

Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W. and Beechum, N.O. (2012). Teaching adolescents to become learners. The role of non-cognitive factors in shaping school performance: A critical

literature review. Chicago: University of Chicago Consortium on Chicago School Research.

Ferla, J., Valcke, M. and Schuyten, G. (2008). Relationships between student cognitions and their effects on study strategies. *Learning & Individual Differences, 18*, 271–278.

Flum, H. and Kaplan, A. (2012). Identity formation in educational settings: A contextualized view of theory and research in practice. *Contemporary Educational Psychology, 37*(3), 240 - 245. doi: 10.1016/j.cedpsych.2012.01.003

Frank, M. (1986). *How to get your Point across in Thirty Seconds or less*. New York: Simon & Schuster.

Franken, R. (1994). *Human motivation* (3rd ed.). Pacific Grove, CA Brooks/Cole Publishing Co.

Freeman, M. (2009). *Researching children's experiences*. New York: Guilford Press.

Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(.), 218-226.

Freire, P. (1985). *The politics of education: culture, power, and liberation*. South Hadley, Mass: Bergin and Garvey.

Frender, G. (1990). *Learning to Learn*. Nashville, TN: Incentive.

Freud, A. (1937). *The Ego and the Mechanisms of Defense*. London: Hogarth Press and Institute of Psycho-Analysis.

Foreman-Peck, L. (2005). What Use is Educational Research? A Debate with Robin Barrow. *Philosophy of Education Society of Great Britain IMPACT, 12.*

Forgas, J.P. and Williams, K.D. (2002). Affective Influences on Self-Perception and Self-Disclosure. In J. P. Forgas, Williams, K. D. (Ed.), *The Social Self: Cognitive, Interpersonal, and Intergroup Perspectives*. New York, London and Hove: Psychology Press.

Forst, R. (2011). The Justification of Human Rights and the Basic Right to Justification. A Reflexive Approach. In C. Corradetti (Ed.), *Philosophical Dimensions of Human Rights. Some Contemporary Views*. Dordrecht: Springer.

Fullan, M., and Langworthy, A. (2014). *Rich seam: How new pedagogies find deep-learning.* London: Pearson.

Gardner, H. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

Gardner, H. (2008). *5 Minds for the Future*: Harvard Business Press.

Gardner, H., Perkins, D., Quense, C., Seidel, S. and Tishman, S. (2003). Ten Years at project Zero - A report on 1993-2002. Retrieved 25th July, 2013, from http://www.pz.gse.harvard.edu/ten_years_at_project_zero.php.

Garfinkel, H. (1967). *Studies in Ethnomethodology*. Englewood Cliffs, NJ USA Prentice-Hall.

Garton, F.A. and Pratt, C. (2001). Peer assistance in children's problem solving. *British Journal of Developmental Psychology, 19*(2), 307–318.

Gayton, J.T. (2003). Academic libaraies: "Social" or "communal"? The nature and future of academic libraries. *The Jouranal of Academic Librairainship, 34*(1), 60-66.

Gentry, J.H., and Campbell, M. (2002). A Reference for Professionals : Developing Adolsecence. Washington DC: Amercan Psychological Society.

Gergen, K.J. (1965). Interactions goals and personalistic feedback as factors affecting the presentations of self. *Journal of Personality and Social Psychology, 1*, 4l3-424.

Gergen, K.J. (1996). Social Psychology as Social Construction: The Emerging Vision In C. McGarty, and Haslam, A (Ed.), *The Message of Social Psychology: Perspectives on Mind in Society* Oxford: Blackwell.

Gergen, K.J. (2001). *Social Construction in Context*. London: Sage.

Gergen, K.J. and Gergen, M. (2000). Qualitative inquiry: Tensions and transformations. . *Handbook of qualitative research, 2*, 1025-1046.

Gergen, K.J. and Gergen, M. (2003). *Social Construction: A Reader* SAGE.

Gibbs, A. (2012). Focus groups and group interviews. In J. Arthur, Waring, M., Coe, R.J., and Hedges, L.V (Ed.), *Research Methods and Methodologies in Education* (Vol. Sage, pp. 186 - 192). London.

Gibson, A. (1927-2003). Althea Gibson Quotes. Retrieved 30th December 2013, from http://womenshistory.about.com/od/gibsonalthea/a/Althea-Gibson-Quotes.htm.

Gilmour, J.A., Kopeikin, A. and Douche, J. (2006). Student nurses as peer mentors – collegiality in practice. *Nurse Education in Practice, Nurse Education in Practice* (7), 36-43.

Gingerich, A.C. and Lineweaver, T.T. (2014). OMG! Texting in Class=¼U Fail :(Empirical Evidence That Text Messaging During Class Disrupts Comprehension. *Teaching of Psychology, 41* (1), 44-51.

Glaser, B.G. (2002). Constructivist Grounded Theory. *FQS Forum : Qualitative Social Research Sozialforschung, 3* (12).

Glasser, W. (1988). *Choice Theory in the Classroom* (Revised Edition ed.). New York: HarperCollins.

Glasser, W. (1990). *The Quality School - Managing Students Without Coercion*. New York: HarperCollins.

Glasser, W. (2001). *Choice Theory in the Classroom* (Revised Edition ed.). New York: HarperCollins.

Goel, V. and Dolan, R.J. (2001). The functional anatomy of humor: segregating cognitive and affective components. *Nature Neuroscience, 4*, 237 - 238.

Goffman, E. (1959). *The Presentation of Self in Everyday Life. (1984 edition)* Garden City New York Doubleday.

Goffman, E. (1981). *Forms of Talk*. Oxford: Oxford: Blackwell.

Goldsmith, M., Stewart, L. and Ferguson, L. (2006). Peer learning partnerships: an innovative strategy to enhance skill acquisition in nursing students. *Nurse Today, 26*, 123-130.

Goldstein, H. and Spiegelhalter, D.J. (1996). League Tables and Their Limitations: Statistical Issues in Comparisons of Institutional Performance. *Journal of the Royal Statistical Society. Series A (Statistics in Society), 159*(3), 385-443.

Goleman, D.P. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ for Character, Health and Lifelong Achievement.* New York: Bantam Books.

Goodacre, B. (2013). ResearchED conference Retrieved 5th May 2015, from www.researched2013.co.uk.

Goodbourn, R., Hartley, T., Higgins S. and Wall. K. (2009). Learning to Learn for Life 3: Research and Practical Examples for Secondary Schools. *Campaign for Learning*

Goodlad, J. I. (1983). A study of Schooling: Some Findings and Hypotheses. *Phi Delta Kappan, 64*, 465-470.

Goodlad, S. and Hirst, B. (1989). *Peer Tutoring – A guide to Learning by Teaching.* London.: Kogan Page.

Gorman, M. (1998). The 'structured enquiry' is not a contradiction in terms: focused teaching for independent learning. *Teaching History, 92*, 20-25.

Gove, M. (2011). Michael Gove to Twyford Church of England High School. Retrieved 1st April 2012, from http://www.education.gov.uk/inthenews/speeches/a0073212/michael-gove-to-twyford-church-of-england-high-school.

Gove, M. (Writer). (2013a). Secretary of State for Education Michael Gove's statement in the House on the OECD's 2012 PISA results. In BBC (Producer). Gov.Uk: https://www.gov.uk/government/speeches/2012-oecd-pisa-results.

Gove, M. (2013). Michael Gove's A-level reforms will narrow pupil choice, say critics. Retrieved 22nd Feb, 2015, from http://www.theguardian.com/education/2013/jan/23/michael-gove-a-level-reforms.

Gray, J., Galton, M., McLaughlin, C., Clarke, B. and Symonds, J. (2011). *The Supportive School: Wellbeing and the Young Adolescent.* Cambridge: Cambridge Scholars Publishing

Gray, J. (2012). Wellbeing Matters too. *Research Intelligence, Spring 2012*(117), 30.

Green, J., Nelson, G., Martin, A.J. and Marsh, H. (2006). The causal ordering of self-concept and academic motivation and its effect on academic achievement. *International Educational Journal, 7*(4), 534- 546.

Gopelrud, E.N. (1991). Preventing Adolescent Drug Use: From Theory to Practice *Alcohol, Drug Abuse, and Mental Health Administration (DHHS/PHS), Office for Substance Abuse Prevention.* Rockville, Maryland, USA: Office for Substance Abuse Prevention.

Gorard, S. . (2006). Towards a judgement-based statistical analysis. *British Journal of Sociology of Education, 27*(1), 67-80.

Gramsci, Antonio (1971) *Selections from the Prison Notebooks of Antonio Gramsci*, New York, International Publishers

Grinyer A. (2002) *Cancer in young adults: through parents' eyes*, Open University Press, Buckingham.

Gross, J., Lakey, B., Lucas, J., LaCross, R., R. Plotkowski, A. and Winegard, B. (2015). Forecasting the student-professor matches that result in unusually effective teaching. *British Journal of Educational Psychology, 85*(1), 19-32.

Guardian. (2012). A-levels: improving no more- The pattern of results, the total number of college places and its distribution continue to flow from Whitehall decisions. *The Guardian.* Retrieved from http://www.guardian.co.uk/commentisfree/2012/aug/16/a-level-results-admissions#start-of-comments

Guay, F., Marsh, H.W. and Boivin, M. (2003). Academic self-concept and academic achievement: Developmental perspectives on their causal ordering. *Journal of Educational Psychology, 95*(1), 124–136.

Guba, E.G. and Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.),*Handbook of qualitative research* (pp. 105-117). London: Sage

Guba, E.G. and Lincoln, Y.S. (2000). Paradigmatic controversies, contardictions and energing confluences. In N. Denzin, and Lincoln, Y. (Ed.), *Handbook of Qualitaive Research* (pp. 163- 188). London: SAGE.

Gubrium, J.F. and Holstein, J.A. (2001). *Handbook of Interview Research – Context and Method.* London.: Sage.

Guo, J., Nagengast, B., Marsh,H.W., Kelava,A., Gaspard, H., Brandt, H., Cambria, J., Flunger, B. (2016). Probing the Unique Contributions of Self-Concept, Task Values, and Their Interactions Using Multiple Value Facets and Multiple Academic Outcomes. *AERA open, 2*(1), 1-20.

389

Habermas, J (1981). *The Theory of Communicative Action* (Vol. 1 and 2). Boston: Beacon Press.

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education* (Vol. 1 and 2). New York: D Appleton & Co

Hall, D. and Marsh, H.M.C. (1998). *Retaining full-time students at Calderdale College: Interim report.* Unpublished internal report Calderdale College.

Hall, J. C. (2003). Mentoring and Young people, A literature review (Vol. 114.). The SCRE Centre: University of Glasgow Research Report

Hakel, M. D. (2001). Learning that Lasts. *Psychological Science, 12*(5 September), 433 - 434.

Hamachek, D. (1995). Self-concept and school achievement: Interaction dynamics and a tool for assessing the self-concept component. *Journal of Counselling and Development, 73*, 419-425

Hamlyn, D.W. (1983). *Perception, Learning and the Self: Essays in the Philosophy pf Psychology.* London: Routledge.

Hammersley, M. (1996). The relationship between qualitative and quantitative research: Paradigm loyalty versus methodological eclecticism. In J. T. E. Richardson (Ed.), *Handbook of Research in Psychology and the Social Sciences.* Leicester UK: BPS Books.

Hargreaves, D (2004). *About learning*: Demos.

Hargreaves, L. (2009). 'It's Good to Talk!': Improving Communication between pupils and Teachers and why it's worth the effort. In M. Galton, Steward, S., Hargreaves, L., Page, C., and Pell, A (Ed.), *Motivating your Secondary Class.* London: SAGE.

Hargreaves, A. and Shirley, D. (2009). *The Fourth Way The Inspiring Future for Educational Change.* Thousand Oaks California: Corwin.

Hardy, C., Lawrence, T.B. and Grant, D. . (2005). Discourse and collaboration: The role of conversations and collective identity. . *Academy of Management Review, 30*(1), 58-77.

Harnisch, H. and Taylor-Murison, L. (2010). *Breaking down barriers to progression – the blended way.* Paper presented at the British Educational Research Association Annual Conference, University of Warwick, September.

Harter, S (1998). The development of self-representations. In N. Eisenberg (Ed.), *Social, emotional, and personality development* (Vol. 5th ed., Vol. 3,, pp. 553-618). New York: Wiley.

Harter, S. (1982). The perceived competence scale for children. *Child Development, 53*, 87-89.

Hartley, J. (2013). Some thoughts on Likert-type scales. *International Journal of Clinical and Health Psychology, 13*, 276-279.

Harvard Family Research Project (2010). *Parent-Teacher Conference Tip Sheets for Principals, Teachers and Parents.* Harvard: Harvard Graduate School of Education.

Hattie, J.A.C. (1992). *Self-concept.* Hove & London: Lawrence Erlbaum Associates.

Hattie, J.A.C. (2003). Getting back on the correct pathway for self-concept research in the new millennium: revisiting misinterpretations of and revitalising the contributions of J' agenda for research on the self advances. In H.W.Marsh, Craven, R.G and D.M. McInerney (Ed.), *International advances in self research.* Greenwich, CT: Information Age Publishers.

Hattie, J.A.C. (July, 2004). *The thread model of self-concept.* Paper presented at the Keynote address to International Self Conference, Max Plank Institute, Germany.

Hattie, J.A.C. (2009). *Visible Learning.* Oxon: Routledge.

Have, P. ten. (2007). *Doing Conversational Analysis: A Practical Guide* (Second ed.). London: Sage.

Haynes, K. (2015). Empowering Students to Take Ownership of Learning. *K-12 News, Lessons and Shared Resources bt Teachers, for Teachers.* Retrieved April 2nd, 2015, from http://www.teachhub.com/empower-student-to-take-ownership-of-learning.

Healey, M., Jenkins, M. and Roberts, C (2005). *Researching and evaluating inquiry-based learning in CeAL (Centre for Active Learning in Geography, Environment and Related Activities).* Paper presented at the Discussion paper for 'Researching and evaluating research-based learning in CETLs symposium, University of Brimingham.

Heath, C.C. (2011). Embodied Action: Video and the Analysis of Social Interaction. In D. Silverman (Ed.), *Qualitative Research issues of Theory, Method and Practice.* London: SAGE Publications.

Heath, C.C., Hindmarsh, J. and Luff, P. (2010). *Video in Qualitative Research: Analysing Social Interaction in Everyday Life.* London: Sage.

Hennink, M., Hutter, I., Bailey, A. (2011). *Qualitative Research Methods.* London: Sage.

Herr, K., and Anderson, G.L.(2005). *The Action Research Dissertation- A guide for students and Faculty.* Sage Publications.

Hibbert, B. (2001). 'It's a lot harder than politics'...students' experience of history at Advanced Level. *Teaching History, 109* (London: The Historical Association).

Higgins, E. T., Klein, R. and Strauman, T (1987). Self-discrepancies: Distinguishing among self-states, self-state conflicts, and emotional vulnerabilities. In K. M. Yardley, Honess, T. M (Ed.), *Self and identity: Psychosocial perspectives* (pp. pp. 173-186). New York: Wiley

Higgins, P. (1988). *The Prevention of Drug Abuse Among Teenagers: A Literature Review*. St. Paul, MN:: Amherst H. Wilder Foundation.

Hill, R. and Reddy, P. (2007). Undergraduate peer mentoring: An investigation into processes, activities and outcomes. *Psychology Learning and Teaching, 6*(2), 98–103.

Hinsz, V.B. (1990). Cognitive and consensus processes in group recognition memory performance. *Journal of Personality and Social Psychology, 59*, 705-718.

Hirsch, B. J and Rapkin, B.D. (1987). The Transition to Junior High School: A Longitudinal Study of Self-Esteem, Psychological Symptomatology, School Life, and Social Support. *Child Development, 58*(5 Special Issue on Schools and Development (Oct., 1987)), 1235-1243.

Hodgson, A., Spours, K. and Savory, C.(2003). What do we mean by a Broader Curriculum? Curriculum 2000, breadth and 14-19 reform.What do we mean by a broader curriculum? Curriculum 2000 and broadening the advanced level curriculum.: Nuffield Foundation Education Seminar. Retrieved from http://89.28.209.149/fileLibrary/doc/briefing01.doc.

Hodkinson, P. and Bloomer, M. (2000). Stokingham Sixth-form College: Institutional culture and dispositions to learning. *British Journal of Sociology of Education, 21*(2), 187-202.

Hoffrage, U. and Pohl, R. (2003). *Hindsight Bias: A Special Issue of Memory*. Champlain, USA: Psychology Press.

Hogan, C. (1992). "You Are Not Studying Alone" - Introducing Experiential Learning into the Teaching of Organizational Behaviour. *Education and Training, 34*(4), 14.

Holstein, J. and Gubrium, J. (1997). Active Interviewing. In D. Silverman (Ed.), *Qualitative Research: Theory Method and Practice* (pp. 113-129). London: Sage.

Holt, E. (2012). Conversation Analysis and Laughter. *The Encyclopedia of Applied Linguistics.* doi: DOI: 10.1002/9781405198431.wbeal0207

Holzman, L. (2009). *Vygotsky at work and play*. Sussex: Routeldege.

Hopgood, T. (2014). No time for Playtime. *Report June/ July*

Horney, K. (1950). *Neurosis and Human Growth: The Struggle Toward Self-Realization*. New York: Norton and Company Inc.

House, D.J. (2000). The Effect of Student Involvement on the Development of Academic Self-Concept. *The Journal of Social Psychology, 140*(2).

Howcroft, J.G. (1991). Self-esteem and academic achievement of black and coloured university students. *Acta Academica, 23*(3), 106-117.

Hoyle, D. (2008) 'Problematizing Every Child Matters', *the encyclopaedia of informal education*. [www.infed.org/socialwork/every_child_matters_a_critique.htm]

IIP. (2015). Investors in People. Retrieved July 10th, 2015, from
    http://www.investorsinpeople.co.uk/the-journey

Jackson, C. (2006). *'Lads' and 'ladettes' in school: Gender and a fear of failure.*
    Maidenhead: Open University Press.

Jacques, D. and Salmon, G. (2006). *Learning In Groups- A handbook for face to face
    and online environments* (4th ed.). London and New York: Routledge Taylor and
    Francis.

Jairan, D., Kiewra, K.A., Rogers-Kasson, S., Patterson-Hazley, M. and Marxhausen, K.
    (2014). SOAR versus SQ3R: A test of two study groups. *Instructional Science, 42*,
    409-420.

James, W. (1890). *Principles of Psychology.* New York: Holt, Reinhardt and Wilson.

Johnson, D.W. and Johnson, R.T.(1994). Collaborative learning and argumentation. In P.
    K. C. Rogers (Ed.), *Groups in schools* (pp. 66–86). London.

Johnson, D.W. and Johnson, R.T.(1996). Cooperation and the use of technology. In D.
    H. Jonassen (Ed.), *Handbook of research for educational communications and
    technology* (pp. (pp. 785-812)). New York: Simon and Schuster.

Johnson, R.B. and Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research
    Paradigm Whose Time Has Come. *Educational Researcher, 33*(7), 14-26.

Johnson, B, J. and Onwuegbuzie, A. J. (2006). The Validity Issue in Mixed Methods
    Research. *Research in the Schools, 13*(1), 48-60.

Johnson, J.M. and Rowlands, T. (2012). The interpersonal Dynamics of In depth
    Interviewing. . In J. F. Gubrium, Holstein, J.A., Marvasti, A.B., and McKinney, K.D
    (Ed.), *The SAGE Handbook of Interview Research- The complexity of the Craft.*
    London: Sage.

Jones, A. and Issroff, K. (2005). Learning technologies:Affective and social issues in
    computer-supported collaborative learning. *Computers and Education, 44*, 399-
    408.

Jones, C. (2011). Ethical issues in online research, British Educational Research
    Association on-line resource.   Retrieved 1st April, 2015

Jungert, T. (2008). A longitudinal study of engineering students' approaches to their
    studies. *Higher Education Research and Development, 27*(3), 201-214.

Kaufman, A. and Dodge,T.(2009). Student perceptions and motivation in the classroom:
    exploring relatedness and value. *Soc Psychol Educ 12:, 12*, 101–112.

Keele, R. (2010). *Nursing research and Evidence-Based Practice* Jones and Barlett
    Learning.

Kezar, A. (2000). The Importance of Pilot Studies: Beginning the Hermeneutic
Circle. *Research in Higher Education, 41*(3), 385–400.

Kincheloe, J.L. (2003). *Teachers as Researchers: Qualitative Inquiry as a path to Empowerment.* Abingdon, Oxon Routledge.

Kincheloe, J.L. and Berry, K.S.(2004). *Rigour and Complexity in Educational Research.* Maidenhead, England: Open University Press.

King, J.A. (1995). Involving Practioners in evaluation studies: how viable is collaborative evaluation in schools? In J. B. Cousins and. Earl, L. M. (Ed.), *Participatory Evaluation in Education: Studies in Educational Evaluation and Policy Analysis.* (pp. 19, 20, 21). London: Falmer.

Knoblauch, H., Scnettler, B., Raab, J. and Söffner, H-G. (Ed.). (2006). *Video Analysis: Methodology and Methods qualitative Audio-visual Data Analysis in Sociology.* Frankfurt am Main: Lang-Verlag.

Kreijns, K., Kirschner, P.A. and Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: A review of the research. *Computers in Human Behavior, 19*, 335–353.

Koh, K.H., Tan,C. and Ng, P.T. (2012). Creating Thinking Schools through authentic assessment: The case in Singapore. *Educational Assessment, Evaluation and Accountability, 24*(2), 135-149.

Korhonen, J., Linnanmäki, K., and Aunio, P. (2014). Learning difficulties, academic well-being and educational dropout: A person-centred approach. *Learning and Individual Differences, 31*, 1-10.

Kuncel, N.R., Crede, M. and Thomas, L.L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of Educational Research, 75*(1), 63–82.

Kvale, S. (1996). *InterViews: An Introduction to Qualitative Research Interviewing.* California. Thousand Oaks.: Sage.

Ladyshewsky, R.K. (2000). Peer assisted learning in clinical education: a review of terms and learning principles. *Journal of Physical Therapy Education, 14*, 15-22.

Låftman, S.B., Almquist, Y.B., and Östberg,V. (2013). Students' accounts of school-performance stress: a qualitative analysis of a high-achieving setting in Stockholm, Sweden. *Journal of Youth Studies, 16*(7).

Lambert, N.M. and McCombs, L.B. (1998). *How Students Learn Reforming Schools Through Learner- Centered Education.* Washington D.C: American Psychological Association.

Lardon, M. (2008). *Finding your zone: Ten core lesons for achieving peak performances in sports and life.* New York: Penguin Group.

Latané, B., Williams, K. and Harkins, S.(1979). Many Hands make light work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology, 37*, 822-832.

Lau, I. C., Yeung, A.S. and Jin, P. (1998). *Academic self-concept structure of higher education students.* Paper presented at the Paper presented at the meeting of the Higher Education Research and Development Society of Australia, New Zealand: Auckland.

Laurillard, D. (2008). Technology enhanced learning as a tool for pedagogical innovation. *Journal of Philosophy of Education, Aug-Nov*(42 (3/4)), 521-533

Lazar, A.M. (1995). Who is studying in Groups and Why - Peer Collaboration Outside the Classroom. *College Teaching, 43*(2), 61-65.

Lea, S.J., Senson, D. and Troy, J. (2003). Higher Education Students' Attitudes to Student Centred Learning: Beyond 'educational bulimia'. *Studies in Higher Education, 28*(3), 321–334.

Leadbetter, C. (2004). *The Shape of Things to Come: Personalised learning through collaboration.*: NCSL.

Littleton, K. and Mercer, N. (2013). *Interthinking putting Talk to work.* London and New York: Routeledge.

Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology, 140*, 1-55.

Lister, M. and Wells, L. (2001). Seeing beyond Belief: cultural studies as an approach to analysing the visual In T. van Leeuwen, and Jewitt, C. (Ed.), *The Handbook of Visual Analaysis* (pp. 61-91). London: Sage

Liu, H.J. (2008). The relationship between EFL student academic self-concept and language performance. *Feng Chia Journal of Humanities and Social Sciences, 17*, 165-184.

Liu, W., Wang, C.D.J. and Parkins, E.J. (2005). A longitudinal study of students' academic self-concept in a streamed setting: The Singapore context. *British Journal of Educational Psychology, 74*(4), 567. Mac an Ghaill, M. (2007). Masculinity, homophobia, and teaching. In B. B. Banks (Ed.), *Gender and Education: An Encyclopaedia.* New York: Greenwood Press.

Loertscher, D. (2011). *The new learning commons where learners win! Reinventing school libraries and computer labs.* Salt Lake: Hi Willow.

Lowe, P.A., Lee, S.W., Witteborg, K.M. (2008). The Test Anxiety Inventory for Children and Adolescents (TAICA). *Journal of Psychoeducational Assessment, 26*(3), 215-230.

Lunt, I. (2015). Professional Doctorates and their Contribution to Professional Development and Careers In ESRC (Ed.), *ESRC Full Research Report, R000223643* Swindon: ESRC.

Macnaghten, P. and Myers, G. (2004). Focus Groups: The Moderator's View and the Analyst's View. In G. Gobo, Gubrium, J., Seale, C. & Silverman, D (Ed.), *In Qualitative Research Practice.* London: Sage.

Main, M. (2000). The organized categories of infant, child, and adult attachment: Flexible vs. inflexible attention under attachment-related stress. *Journal of the American Psychoanalytic Association, 48*(4), 1055-1096

Markus, H. and Zajonc, R.B. (1985). The Cognitive Perspective in Social Psychology. In G. Lindzey, Aronson, E (Ed.), *The Handbook of Social Psychology* (Third ed., Vol. 1, pp. 137-230). London: Random House.

Marra, R.M., Rodgers, K.A., Shen, D.M. and Bogue, B. (2009). Women Engineering Students and Self-Efficacy: A Multi-Year, Multi-Institution Study of Women Engineering Student Self-Efficacy. *Journal of Engineering Education, 98*(1), 27-38.

Marsh, H.W., Relich, J.D. and Smith, L.D. (1983). Self concept: the construct validity of interpretations based upon the SDQ. *Journal of Personality and Social Psychology, 45*, 173-187

Marsh, H.W., Parker, J.W. and Barnes, J. (1984). Multi-dimensional adolescent sel-concept : their relationship to age, sex and academic measures. *American Educational Research Journal, 22*, 422-444.

Marsh, H.W., Smith, I.D. and Barnes, J. (1985). Multidimensional self-concept: relationship with sex and acasemic achievement. *Journal of Educational Psychology, 77*, 581-596.

Marsh, H.W. and Shavelson, R. (1985). Self-concept: Its multifaceted, hierarchical structure. *Educational Psychologist, 20*, 107-125.

Marsh, H.W., Balla, J.R. McDonald, R.P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin, 103*(3), 391.

Marsh, H.W., Byrne, B.M. and Shavelson, R.J. (1988). A multifaceted academic self-concept: Its hierarchical structure and its relation to academic achievement. *Journal of Educational Psychology, 80*(3), 366-380.

Marsh, H.W. (1990). Causal ordering of academic self-concept and academic achievement: A multiwave, longitudinal panel analysis. *Journal of Educational Psychology, 82*, 646-656.

Marsh, H.W. (1990). Self Description Questionnaire III SDQ III. Campbelltown, Australia: University of Western Sydney.

Marsh, H.W. (1992). Self-Description Questionnaire III: Manual. In Faculty of Education University of Western Sydney (Ed.), *Publication Unit,* Macarthur.

Marsh, H.W. (1996). Positive and negative global self-esteem: A substantively meaningful distinction or artifactors? *Journal of Personality and Social Psychology, 70*(4), 810-819.

Marsh, H.W. and Yeung, A.S. (1997). Causal effects of academic self-concept on academic achievement: Structural equation models of longitudinal data. *Journal of Educational Psychology, 89*(1), 41–54.

Marsh, H.W. and Yeung, A.S. (1998). Longitudinal structural equation models of academic self-concept and achievement: Gender differences in the development of math and English constructs, *American Educational Research Journal* 35(4). 705- 38.

Marsh, H.W., Byrne, B.M., Yeung. A.S. (1999). Causal ordering of academic self-concept and achievement: Reanalysis of a pioneering study and revised recommendations. *Educational Psychologist, 34*(3),155-167.

Marsh, H.W. (2000). *Self-Concept Theory, Research and Practice: Advances for the New Millennium.* Paper presented at the Self Research centre, Sydney, Australia.

Marsh, H.W. and Hau, K.-T (2004). Explaining paradoxical relations between academic selfconcepts and achievements: Cross-cultural generalizability of the internal/external frame of reference predictions across 26 countries. *Journal of Educational Psychology, 96* (56-67).

Marsh, H.W., Trautwein, U., Lüdtke, O., Köller, O. and Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child Development, 76* (2), 397–416.

Marsh, H.W., Hau, K.T., Artelt, C., Baumert, J. and Peschar, J.L. (2006). OECD's brief self- report measure of educational psychology's most useful affective constructs: Cross-cultural, psychometric comparisons across 25 countries. *International Journal of Testing, [Special issue] 6*, 311–360.

Marsh, H.W. and Craven, R.G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and uni-dimensional perspectives. *Perspectives on Psychological Science* (1), 133-163.

Marsh, H.W. (2006). Self-concept theory, measurement and research into practice: The role of self-concept in educational psychology. *British Psychological Society, 25th Vernon Wall lecture* (Durham University 2005).

Marsh, H.W. (2010). *Self-description questionnaire-III Manual.* SELF Research Centre University of Oxford.

Marsh, H.W., Martin, A.J. and Jackson, S. (2010). Introducing A short version of the Physical Self Description Questionnaire: New strategies, short-form evaluative criteria, and applications of factor analyses. *Journal of Sport & Exercise Psychology, 32*, 438-482.

Marsh, H.W. and Martin, A.J. (2011). Academic self-concept and academic achievement: relations and causal ordering. *British Journal of Educational Psychology* (March 8), 59-77.

Martin, A.J. (2012). Academic buoyancy and academic outcomes: Towards a further understanding of students with attention-deficit/hyperactivity disorder (ADHD), students without ADHD, and academic buoyancy itself. *British Journal of Educational Psychology*.

Martin, M. and Edwards L. (1998). Peer learning on field work placements. *British Journal of Occupational Therapy, 61*, 249– 252.

Martinez, P. and Munday, F. (1998). *9,000 voices: student persistence and drop-out in further education.* London: FEDA.

Maslow, A. (1954). *Motivation and personality.* New York: Harper.

Maxim, P. (1999). *Quantitative Research Methods in the Social Sciences*. Oxford: Oxford University Press.

Maxwell, S. E., and Delaney, H. D. (2004). Designing experiments and analyzing data. Mahwah, NJ: Lawrence Erlbaum

Mayer, M., Haywood, N., Sachdev, D. and Faraday, S. (2008). *Independent Learning- Literature Review*. Learning and Skills Network. Research Report No DCSF-RR051.

McClelland, M., Morrison, F.J. and Holmes, D.L.(2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly, 15*, 307–329.

McCombs, B.L. (1986). The role of the self-system in self-regulated learning. *Contemporary Educational Psychology, 11*, 314-332.

McCombs, B.L. (1998). Integrating Metacognition, Affect, and Motivation in Improving Teacher Education. In N. M. Lambert, and McCombs, L.B (Ed.), *How Students Learn Reforming Schools Through Learner- Centered Educatiion* (pp. 379-408). Washington, D.C: American Psychological Association.

McGhee, P. E. (1988). Introduction: recent developments in humor research. *Journal of Children in a Contemporary Society, 20*(1), 1-12.

McInerney, D. M., Cheng, R., Mok, M.,Lam, A (2012). Academic Self-Concept and Learning Strategies - Direction of Effect on Student Academic Achievement *Journal of Advanced Academics, 23*(3), 249-269.

McIntosh, J. (2006). So what do you expect? *The Psychologist, The British Psychological Socciety,* Vol 19, 10 pp 612-613. file:///Users/admin/Downloads/1006stud.pdf

McKeon, R (Ed.). (1941). *The Basic Works of Aristotle*. New York: Random House.

McMillan, J.H. and Schumacher, S. (2006). *Research in Education: Evidence-based inquiry* (Vol. 6). Boston: Pearson.

McNamara, C. (2009). General guidelines for conducting interviews. Retrieved 5th April, 2015, from http://managementhelp.org/evaluatn/intrview.htm

McWilliam, E. (2002). The professional doctorate: More than an 'alternative PhD. *Perspectives on Educational Leadership, 12* (5), 1-2.

Mead, G.H. (1934). *Mind, Self and Society*. Chicago: University of Chicago Press..

Mercer, N. (2000). *Words and Minds How we use language to think together*. London: Routledge Taylor Francis Group.

Mercer, S. (2011). *Towards an understanding of language learner self-concept.* (Vol. 12): Springer.

Merton, R.K., Fiske, M. and Kendall, P.L. (1956). *The Focused Interview: A Manual of Problems and Procedures*. New York: Free Press.

Messmer, M. (2001). Becoming a peak performer. *Strategic Finance, 82* (8), 8-10.

Michaels, J.W. and Miethe, T.D (1989). Academic Effort and College Grades. *Social Forces, 68*(1), 309-319.

Miles, M.B. and Huberman, A.M. (1994). *Qualitative Data Analysis* (2nd edition ed.). Thousand Oaks, CA: Sage Publications.

Miller, D.W. (1999). The black hole of educational research. *Chronicle of Higher Education, 6* (August).

Miliband, D. (2004). *Personalised Learning: Building a New Relationship with Schools.* Paper presented at the North of England Education Conference, Belfast.

Mills, B.J. and Cottell Jr, P.G. (1998). *Cooperative learning for Higher Education faculty*. Phoenix, AZ: American Council on Education andt the Oryx Press.

Mills, R.C. (1995). *Realising Mental Health*. New York: Sulbuger and Graham.

Mills, T.M. (1958). Some Hypotheses on Small Groups from Simmel. *American Journal of Sociology, 63* (6), 642-650.

Mirza-Davies, J. (2014). NEET: Young People Not in Education, Employment or Training. House of Commons Library.

Möller, J., Pohlmann, B., Köller, O. and Marsh, H.W. (2009). A meta-analytic path analysis of the internal/external frame of reference model of academic achievement and academic self-concept. *Review of Educational Research,, 79*, 1129–1167.

Morgan, D.L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research, 8* (3), 362-376.

Moriarty, B., Douglas, G., Punch,K. and Hattie, J. (2011). The importance of self-efficacy as a mediating variable between learning environments and achievement *British Journal of Educational Psychology, 65* (1), 73-84.

Morreall, J. (1991). Humor and work. *Humor, 4*, 359-373.

Mumsnet. (2014). Stressed out Yr 12's. Retrieved 4th August, 2014, from http://www.mumsnet.com/Talk/secondary/1077030-Stressed-out-yr-12/AllOnOnePage.

National Audit Office. (2002). *Improving Student Achievement in English Higher Education*. London:The Stationery Office.

National College (2012). Retrieved 31st January, 2012, from https://member.goodpractice.net/nclscs-leadership/resources/leading-change/leading-change/communicating-for-change/communicating-change.gp

NCCA. (2013). *Supporting a Better Transition from a Second Level to Higher Education*. Ireland: National Council for Curriculum and Assessment.

NCCA. (2015). *Supporting a better transition from second level to higher education: Implemenation and next steps.* Ireland: National Council for Curriculum and Assessment Retrieved from http://www.transition.ie/files/Supporting%20a%20Better%20Transition%20from%20Second%20Level%20to%20Higher%20Education%20-%20Implementation%20and%20Next%20Steps_April%202015.pdf.

Nestojko, J.F., Bui, D.C., Kornell, N. and Bjork, E.L. (2014). Expecting to teach enhances learning and organization of knowledge in free recall of text passages. *Memory & cognition, 42* (7), 1038-1048 doi: 1038-48 PMID: 24845756

Newby, P. (2010). *Research Methods for Education*. Harlow, England: Pearson Education Ltd.

Nicholson, L., Putwain, D., Connors, L. and Hornby-Atkinson, P. (2013). The key to successful achievement as an undergraduate student: confidence and realistic expectations? *Studies in Higher Education, 38* (2), 285-298.

Nicholson, R. I. (2015). *Anxiety: The Assassin of Learning.* Paper presented at the Sigma Network- Being Inclusive Conference, Sheffield, January 2015.

North, A.C., Linley, A. and Hargreaves, D.J. (2001). Social loafing in a co-operative classroom task. *Educational Psychology, 20*, 389-392.

Norušis, M. (2012). *IBM SPSS Statistics 19 Guide to Data Analysis* (Vol. 2014): Pearsons Higher Education.

O'Sullivan, E. (1999). *Transformative Learning- Educational Vision for the 21st Century*. Cynthia Street, London: Zed Books.

OECD. (2003). *Learners for Life. Student approaches to learning. Results from PISA 2000.* Paris: -Organisation for Economic Co-operation and Development and UNESCO.

OECD. (2016). Building skills for all: A review of England. Policy Insights from a survey of Adult skills. Eds: M. Kuczera, Field, S., and Windisch, H,C. http://www.oecd.org/unitedkingdom/building-skills-for-all-review-of-england.pdf:

OECD.OFQUAL. (2014). *Statistical Release: Enquiries about results for GCSE and A level provisional Statistics for Summer 2014 Exam Series.* London: The Office of Qualifications and Examinations Regulation Retrieved from file:///Users/admin/Downloads/2014-10-21-enquiries-about-results-provisional-summer-2014-revised.pdf.

OFSTED. (2007a). *The Annual Report of Her Majesty's Chief Inspector of Education*. London: The Staitionery Office.

OFSTED. (2007b). *Developing social, emotional and behavioural skills in secondary schools*. London: Retrieved from www.ofsted.gov.uk.

OFSTED. (2008). *A Comparison of the Effectiveness of Level 3 Provision in 25 Post-16 Providers*. London: Ofsted.

Olivera, F. and Straus, S.G. (2004). Group-to-Individual Transfer of Learning: Cognitive and Social Factors. *Small Group Research, 35*, 440 -465

Oxford Royale Academy (2015). Top Advice for New Sixth-formers: 13 ways to make the most of Year 12. Retrieved 18th February 2015, from https://www.oxford-royale.co.uk/articles/top-advice-sixth-formers.html

Palincsar, A.S. and Brown, A.L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(2), 117 – 175.

Paris, S.G. and Newman, R.S.(1990). Developmental aspects of self-regulated learning and contexts that support it. *Journal of Educational Psychology, 90*, 87–102.

Paton, G. (2013). Too many teenagers 'allowed to drop out of education'. *The Daily Telegraph* Retrieved from http://www.telegraph.co.uk/education/educationnews/10370746/Too-many-teenagers-allowed-to-drop-out-of-education.html.

Phielix, C., Prins, J.F. and Kirschner, A.P. (2010). Awareness of group performance in a CSCL-environment: Effects of peer feedback and reflection. *Computers in Human Behavior, 26,* (2), 151–161.

Piaget, J. (1971). *The science of Education and psychology of the child* (D. Coltman., Trans.). London: : Longmann.

Pinker, S. (1994). *The Language Instinct*. London: Penguin.

PISA (2009). How big is the gap? A comparison of pupil attainment in England with the top-performing countries.

Pitcher, R. (2014). Teacher professional development, Teachers' work. Retrieved from http://www.aare.edu.au/blog/?p=763.

Poirier, C. F. (1992). A Student Teacher's Voice: reflections on power. *Journal of Education for Teaching, 18*(1).

Pollard, A.J.M., Blatchford, P., Rudduck, J., Hughes, M. and Sutherland, R. (2004). Personalised Learning- A Commentary by the Teaching and Learning research programme. In TLRP (Ed.), *ESRC*: ERSC.

Popper, K. (1969). *Conjectures and refutations*. London: Routledge and Kegan Paul

Powney, J. and Watts, M. (1987). *Interviewing in Educational Research*. London: Routledge and Kegan Paul.

Pressley, M. (1995). More about the development of self-regulation: Complex, long- term and thoroughly social. *Educational Psychologist., 30* (4), 207–212.

Pring, R. (2000). *Philosophy of Educational Research*. London: Continuum.

Pring, R. (2004). *Philosophy of education: Aims, Theory, Common Sense and Research*. London and New York: Continuum.

Pring, R., Hayward, G., Hodgson, A., Johnson, J., Keep, E., Oancea, A., Rees, G., Spours, K. and Wilde, S. (2009). *Education for All - The futiure of Education and Training for 14-19 year olds*. Abingdon, Oxon, New York: Routledge.

Prior, J. (1995). Gender issues in groupwork: a case study involving work with computers. *British Education Research Journal, 21*(3), 277–288.

Prospects. (2013). Applying for jobs: What skills do employers want?   Retrieved 24th July 2013, 2013, from http://www.prospects.ac.uk/applying_for_jobs_what_skills_do_employers_want.htm.

Purkey, W. (1988). An overview of self-concept theory for counselors. *ERIC Clearinghouse on Counseling and Personnel Services,.* Retrieved December 2009, from http://www.edpsycinteractive.org/files/selfconc.html.

Quinn, N. (1997). Research on the psychodynamics of shared understandings. In Strauss, C. and Quinn, N. (Ed.), *A cognitive theory of cultural meaning* (pp. 189-209,). Cambridge, New York and Melbourne: Cambridge University Press.

Race, P. (1994). *The Open Learning Handbook* (2nd ed.) London: Kogan Page.

Race, P. (2005). A Fresh Look at Independent Learning. Retrieved 10th March, 2013, from http://www.londonmet.ac.uk/deliberations/effective-learning/independent.cfm.

Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.

Rapley, T. (2011). Some Pragmatics of Data Analysis. In D. Silverman (Ed.), *Qualitative Research Issues of Theory, Method and Practice*. London: SAGE Publications.

Reis, O. and Buhl, H.M. (2008). Individuation during adolescence and emerging adulthood – five German studies. *International Journal of Behavioral Development, 32* (September), 369-371.

Resourcd.com (Producer). (2012). ALIS and Psychology. Retrieved from http://www.resourcd.com/forum/show_discussion/752/20

Rhodewalt, F. and Tragakis, M. (2002). Self-Handicapping and the Social Self: The Cost and Rewards of Interpersonal Self-Construction. In J. P. Forgas, Williams, K. D. (Ed.), *The Social Self: Cognitive, Interpersonal, and Intergroup Perspectives. .* New York, London, Hove Psychology Press.

Richardson, H. (2011). Schools 'should let children pick their teachers'. Retrieved 31st October 2014

Richie, J. and Lewis, J. (2003). *Qualitative Research Practice - A Guide for Social Science Students and Researchers*. London. Thousand Oaks.: SAGE Publications.

Roberts, M.M. (1981). Establishing a study Skills Course for Sixth-Form Students *Educational Research, 24*(1), 24-30.

Rochelle, J. and Teasley, S. (Ed.). (1995). *The construction of shared knowledge in collaborative problem solving.* New York: Springer Verlag.

Robbins, S.B., Lauver, K., Le, H., Davis, D., Langley, R. and Carlstron, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin, 30*, 261–288.

Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science* (Vol. 3 Formulations of the person and the social context). New York: McGraw Hill.

Rogers, C. (Ed.). (1967). *The interpersonal relationship in the facilitation of learning'*. London: Constable.

Rogoff, B. (Ed.). (1998). *Cognition as a collaborative process.* (Vol. 2). New York: John Wiley.

Rogoff, B., Goodman Turkanis, C. and Barlett, L., (Ed.). (2001). *Learning Together: Children and Adults in a School Community*. New York: Oxford University Press.

Rolfe, S.A. (Ed.). (2001). *Direct Observation*. Buckingham: Open University Press.

Rosen, J.A., Glennie, E.J., Dalton B.W., Lennon, J.M. and Bozick, R.N. (2010). Noncognitive Skills in the Classroom: New Perspectives on Educational Research. In R. Press (Ed.), (Vol. No. BK-0004-1009.). N.C: Research Triangle Institute.

Rosenberg, M. (1989). Self-concept Research: A Historical Overview. *Social Forces, 68* (1), 34-44.

Rosenberg, M (1981). The Self-Concept: Social Product and Social Force. In M. Rosenberg, Turner,R. (Ed.), *Social Psychology: Sociological Perspectives* (pp. 593-624): Basic Books.

Rosnow, R.R. and Rosenthal, R. (1996). *Beginning behavioural Research: A conceptual primer* (2nd ed.). EnglewoodCliffs, NJ: Prentice Hall.

Ross, T. (2012). Easy A-levels leave students ill-prepared for university- Teenagers are arriving at university unprepared for rigorous academic courses as some A-levels have become "easy", senior advisers to the government have warned. *The Daily Telegraph*. Retrieved from

http://www.telegraph.co.uk/education/universityeducation/9022706/Easy-A-levels-leave-students-ill-prepared-for-university.html.

Rowling, J. K. (2005). *Harry Potter and the Half-Blood Prince.* London: Bloomsbury.

Sacks, H., Schleghoff, E. A. and Jefferson, G. (1974). A simplest systematics for the organisation of turn-taking for conversation. *Language, 50*(4), 696-735.

Sah, A.N. (2009). *Data Analaysis in Microsoft Excel.* New Delhi: Excel Books.

Samaha, N.V. and De Lisi, R. (2000). Peer collaboration on a nonverbal reasoning task by urban, minority students. *The Journal of Experimental Education, 69* (1), 5-21.

Sánchez, F.J.P. and Roda, M.D.S. (2003). Relationships between self-concept and academic achiement in Primary students. *Electronic Journal of Research in Educational Psychology and Psychopedagogy, 1*, 95-120.

Sandelowski, M. (1986). The problem of rigor in qualitalive research. *Advances in Nursing Science, 8*, 27-37.

Sarkisian, E. (2010). Working in Groups - A Note to Faculty and a Quick Guide for Students. Retrieved 8th Februaray, 2015, from http://isites.harvard.edu/fs/html/icb.topic58474/wigintro.html#refs.

Schunk, D.H (2001). Social cognitive theory and self-regulated learning. In B.J. Zimmerman and D.H. Schunk (Ed.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed., pp. 125–151). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Schunk, D. and Ertmer, P. (Ed.). (2000). *Self-regulation and academic learning: Self-efficacy enhancing interventions*. Burlington, MA: Elsevier Academic Press.

Schunk, D.H. and Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. Eccles (Eds.), *Development of achievement motivation* (pp. 16-31). San Diego: Academic Press.

Schwandt, T.A. (1998). Constructivist, Interpretivist Approaches to Human Inquiry. In N. K. Denzin, and Lincoln, Y. S. (Ed.), *The Landscape of Qualitative Research: Theories and Issues*. Thousand Oaks, London, New Delhi: Sage Publications.

Seacomb, J. (2006). A systematic review of peer teaching and learning in clinical education. *Journal of Clinical Nursing, August*, 703-716. doi: 10.1111/j.1365-2702.2007.01954.x.

Searle, J. (2013). Predicting A-level performance. Retrieved 29th December 2013, 2013, from https://cerp.aqa.org.uk/perspectives/predicting-level-performance.

Seilgman, M.E.P. and Csikszentmihali, M. (2000). Positive Psychology : An Introduction. *American Psychologist, 55*, 5-14.

Seldon, A. (2010). An end to factory schools- an education manifesto 2010-2020. Surrey: Centre for Policy Studies.

Seo, E.H. (2011). The relationships amoung procrastination, flow and academic achievement. *Social Behavior and Personality, 39*(2), 209-217.

Seuss, D. Good reads.com. Retrieved 29th December, 2013, from http://www.goodreads.com/quotes.

Shagen, S., Johnson, F. and Simkin C,. (1996). Sith form Options - post compulsory education in maintained schools. In NFER Research (Ed.). Slough: NFER.

Sharp, C., Pocklington, K. and Weindling, D. (2002). Study support and the development of the self-regulated learner. *Educational Research, 44*(1), 29-41.

Shavelson, R.J., Hubner, J.J. and Stanton, G.C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research, 46*(407-441).

Shetty, S.S. and Srinivasan S.R. (2014). Effectiveness of study skills on academic performance of dental students *Jounal of Education and Ethics in Dentistry, 4*(1), 28-31.

Shoemaker, C. (2011). American Society for Horticultural Science: Student confidence correlated with academic performance. *Psychology & Psychiatry Journal*, 259.

Silverman, D. (2001). *Interpreting Qualitative Data Methods for Analysing Talk, Text and Interaction* (2nd ed.). London, Thousand Oaks: Sage Publications.

Silverman, D. (2007). *A Very Short, Fairly Interesting and Reasonably Cheap Book about Qualitative Research*. London: SAGE.

Silverman, D. (2011). *Qualitative Research Issues of Theory, Method and Practice.* London: SAGE Publications.

Sims, E. (2006). *A shape for new Schooling. Deep learning-1.* London: Specialist Schools and Academies Trust Retrieved from www.ssatrust.org.uk.

Skinner, B.F. (1953). *Science and human behaviour*. New York: Free Press.

Slavin, R.E. (1990). *Cooperative Learning: Theory, research and practice*. Englewood Cliffs, NJ: Prentice Hall.

Smith, C., Christoffersen, K., Davison, H. and Snell- Herzog, P. (2011). *Lost in Transition: The Dark Side of Emerging Adulthood*. New York: Oxford University Press.

Social Theory Rewired. (2011). New Connections to Classical and Contempoary perspectives - Verstehen.   Retrieved 18th April, 2016, from routledegesoc.com

Spielberger, C.D. (1966). Theory and research on anxiety. In C. D. Spielberger (Ed.), *Anxiety and behaviour.* New York: Academic Press.

Staats, A.W. (1963). *Complex Human Behavior*. New York: Holt, Rinehart and Winston.

Stavaredes, T. (2011). *Effective Online Teaching – Foundations and Strategies for Student Success.* London: Wiley and Sons.

Stewart, W. (2015, 22nd April). Leave research to the academics, John Hattie tells teachers. 2015, from https://www.tes.co.uk/news/school-news/breaking-news/leave-research-academics-john-hattie-tells-teachers.

Steward, S. and Page, C. (2009). Teacher and Pupil Development in Different Scool and Classroom Contexts. In M. Galton, Steward, S., Hargreaves, L., Page, C., and Pell, A (Ed.), *Motivating your Secondary Class*. London: Sage.

Swann, J. (1992). *Girls, Boys and Language*. London: Blackwell.

Symonds, J.E. and Gorard, S. (2008). *The death of mixed methods: research labels and their casualties"*. Paper presented at the British Educational Research Association, Heriot Watt University, Edinburgh.

Tang, S-F. (2011). The Relationships of Self-concept, Academic Achievement and Future Pathway of First Year Business Studies Diploma Students *International Journal of Psychological Studies, 3*(2), 123-134.

Tashakkori, A. and Teddlie, C. (1998). *Mixed methodology: combining qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.

Tate, S. and Swords, J. (2013). Please mind the gap: students' perspectives of the transition in academic skills between A-level and degree level geography. *Journal of Geography in Higher Education, 37*(2), 230-240.

Taylor, C. (2012). Improving attendance at school. from https://www.education.gov.uk/publications/eOrderingDownload/improving%20attendance%20at%20school.pdf.

Taylor, J. L. (2012)(b). *Think again A Philosophical Approach to Teaching*. London: Continuum International Publishing group.

Taylor, P.G. (2000). Changing Expectations: Preparing students for Flexible Learning. *The International Journal of Academic Development, 5*(2), 107-115.

TES. (1995). Ask ALIS for grade predictions, *TES Connect*. Retrieved from http://www.tes.co.uk/article.aspx?storycode=17159.

Tew, J., Gell, C. and Foster, S. (2004). Learning from Experience. Involving Service Users and Carers in Mental Health Education and Training: Higher Education Academy/NIMHE/Trent Workforce Development Confederation.

TheSite.org. (2014). Appealing against bad grades.   Retrieved 3rd November 2014, from http://www.thesite.org/work-and-study/student-life/appealing-against-bad-grades-1243.html.

Thomas, A.M. and Perry, J.L (1998). Can AmeriCorps build communities? *Non-profit and Voluntary Sector Quarterly, 27*(4), 399-420.

Thomson, A.M. (2006). Collaboration processes: Inside the Black Box. *Public Administration Review,, 66*(1), 20-32.

Thompson, T. (2004). Re-examining the effects of non-contingent success on self-handicapping behaviour. *British Journal of Educational Psychology, 74,*, 239-260.

Tice, D.M. and Baumeister, R.F. (1990). Self-esteem, self-handicapping, and self-presentation: The strategy of inadequate practice. *Journal of Personality, 58*, 443-464.

Tierney, W.G. and Dilley, P. (2001). Interviewing in Education. In J. F. Gubrium, J.A. Holstein (Ed.), *Handbook of Interview Research – Context and Method*. London: Sage.

Topping, K.J. and Ehly, S (Ed.). (1998). *Peer assisted Learning*. Mahwah, NJ/London, UK: Lawrence Erlbaum.

Topping, K.J. (2005). Trends in Peer learning. *Educational Psychology, 25*(6), 631-645.

Topping, K.J. and Ehly, S.W. (2001). Peer assisted learning: A framework for consultation. *Journal of Educational and Psychological Consultation, 12*, 113 – 132.

Topping, K. J., Miller, D., Murray, P., Henderson, S., Fortuna, C. and Conlin, N. (2011). Outcomes in a randomized controlled trial of mathematics tutoring. *Educational Research, 53*(1), 55-67.

Torrance, H. (2008). Building Confidence in Qualitative Research: Engaging the Demands of Policy *Qualitative Inquiry, June*(14), 507-527.

Tudge, J.R., Winterhoff, P.A. and Hogan, D.M (1996). The cognitive consequences of collaborative problem solving with and without feedback. *Child Development, 67*(6), 2892-2909.

Turanli, A.S. (2009). Students' and Parents' Perceptions about Homework. *Education and Science, 34*(153), 61-73.

Tymms, P., Merrell, C., Thurston, A., Andor, J., Topping, K. and Miller, D. (2011). Improving attainment across a whole district: school reform through peer tutoring in a randomized controlled trial. *School Effectiveness and School Improvement, 22*(3), 265-289.

UCAS. (2012). End of Cycle Report. In U. C. A. Services (Ed.). Rosehill, Cheltenham: UCAS.

UNICEF. (2007). Child Poverty in Perspective: An Overview of Child Wellbeing in Rich Countries. Florence, Innocenti Research Centre: UNICEF.

Vaillant, G.E. (1992). *Ego Mechanisms of Defense: A Guide for Clinicians and Researchers*. Washington, DC: American Psychiatric Press.

Valentine, J.C., Dubois, D.L. and Cooper, H (2004). The relation between self-beliefs and academic achievement: A meta-analytic review. *Educational Psychologist, 39*, 111-133.

van Teijlingen, E., Hundley, V. (2001). The importance of pilot studies. *Social Research Update, Winter* (35).

Visschers-Pleijers, A., Dolmans, D., De Grave, W. S., Wolfhagen, I., Jacobs, J.A. and Van der Vleuten, C.P.M. (2006). Student perceptions about the characteristics of an effective discussion during the reporting phase in problem-based learning. *Medical Education, 40*(9), 924-931.

Vygotsky, L.S. (1962). *Thought and Language* (Revised ed.). Cambridge, MA: MIT Press.

Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Wang, F. and Burton, J. (2010). Collaborative learning problems and identity salience: A mixed methods study. *Journal of Educational Technology Development and Exchange, 3*(1), 1-12.

Watkins, C., Carnell, E., Lodge, C. and Whalley, C (1996). Effective Learning. In S. I. N. R. Matters (Ed.), (Vol. No.5). London: University of London, Institute of Education.

Weber, M. (1947). *The Theory of Social and Economic Organisation* (A. M. Henderson, and Parsons, T., Trans.). New York: Free Press.

Weiss, R. (1994). *Learning from Strangers*. New York: Free Press.

Wheatley, G. H. (1991). Constructivist perspectives on science and mathematics learning. *Science Education, 75*, 9-22.

Whitehead, J. and Clough, N (2004). Pupils, the forgotten partners in education action zones. *Journal of Education Policy, 19*(2), 215-227.

Willingham, D. (2015, 2nd May 2015). *The challenge of persuading believers.* Paper presented at the ResearchED, New York.

Winchester, R. (2008). Changes for the better, *The Guardian*. Retrieved from http://www.theguardian.com/society/2008/oct/22/every-child-matters

Wittgenstein, L. (1958). *Philosphical investigations* (G. E. M. Anscombe Ed. Trans. 2nd ed.). Oxford: Blackwell.

Wolcott, H.F. (1990). *Writing Up Qualitative Research (Qualitative Research Methods)*: SAGE Publications.

Wood, L.A. and Kroger, R.O. (2000). *Doing Discourse Analysis: methods for studying action in talk and text.* London: Sage.

Woolfolk, H., A., Demerath, P. and Pape, S. (2001). Teaching adolescents: Engaging developing selves. In T. Urdan. and F. Pajares (Ed.), *Adolescence and education: General issues in the education of adolescents.* Greenwich, CT: Information Age Publishing.

Woolner, P., Hall, E., Wall, K., Higgins, S. and McCaughey, C. (2007). A sound Foundation? What we know about the impact of environments on learning and the implications for Building Schools for the Future. *Oxford Review of Education, 33*, 47-70.

Woulters, S., Colpin, H., Van Damme, J., De Laet, S., Verschueren, K. (2013). Early adolescents' academic self-concept formation: Do classmates or friends matter most? *Learning and Individual Differences, 27*, 193-200.

Wylie, R.C (1979) *The self -concept (Vol 2)* Lincoln, NE. University of Nebraska Press

Wylie, T. (2006). *Annual 14-19 Diplomas Conference.* Paper presented at the Planning and Delivering the Universal Entitlement, Hotel Russell, London.

Yardley, A. (2008). Piecing Together- A Methodological Bricolage. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 9*(2).

Yen, C., Konold, T.R. and McDermott, P.A (2004). Does learning behavior augment cognitive ability as an indicator of academic achievement? *Journal of School Psychology,, 42*, 157–169.

Yew, E.H.J. and Schmidt, H.G. (2007). *Process study of verbal interactions in problem based learning In ICT: Providing choices for learners and learning.* Paper presented at the Ascilite Singapore

Yorke, M. and Thomas, L (2003). Improving the retention of students from lower socioeconomic groups *Journal of Higher Education Policy and Management., 25*, 63-75.

Yurgelun-Todd, D. (2007). Emotional and cognitive changes during adolescence. *Current opinion in Neurobiology, 17*, 251-257.

Zimmerman, B.J. (1989). A social cognitive view of self-regulated learning. *Journal of Educational Psychology, 81*, 329–339.

Zimmerman, B.J. (1990). Self-regulating academic learning and achievement: The emergence of a social cognitive perspective. *Educational Psychology Review, 2*, 173–201.

Zimmerman, B.J. (1996). Dimensions of academic self-regulation: A conceptual framework for education. In D.H. Schunk, and Zimmerman, B.J (Ed.), *Self-regulation and performance: Issues and Educational applications*. Hillsdale, NJ: Erlbaum.

Zimmerman, B.J. and Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In G. D. Phye (Ed.), *Handbook of academic learning: construction of Knowledge* (pp. 105-125). San Diego, CA: Academic Press.

Zimmerman, B.J. (Ed.). (1998). *Developing self-fulfilling cycles of academic regulation: an analysis of exemplary instructional models*. New York: Guilford Press.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal, 45*(1), 166–183.

Zimmerman, B.J. and Schunk, D.H (Ed.).(2001). *Self regulated learning and academic achievement: Theory, research and practice* (2nd ed.). NJ: Erlabum Mahwah.